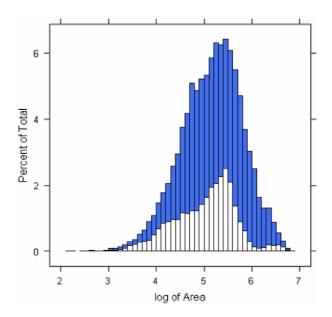


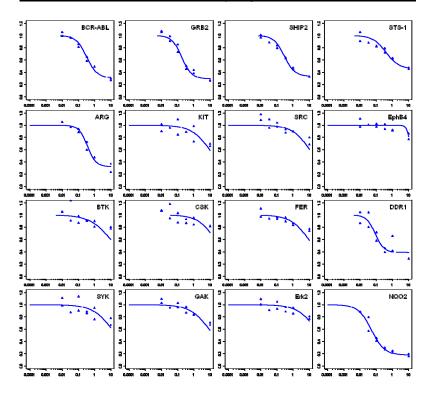
Supplementary Figure 1 Kinase binding profiles of individual immobilized tool compounds and drugs.

The research tool inhibitors Bis (III) indolyl maleimide (protein kinase C inhibitor), purvalanol B (cyclin-dependent kinase inhibitor), CZC8004 and staurosporine (pan-kinase inhibitors); and the drugs or drug candidates PD173955 (Src kinases), vandetanib (VEGFR, EGFR), sunitinib (VEGFR, PDGFR, Flt3, KIT), Ro 320-1195 (p38 MAP kinase), imatinib (ABL, PDGFR, KIT), gefitinib (EGFR), pelitinib (EGFR), and lapatinib (EGFR, Her-2) were immobilized and exposed to lysates from HeLa or K562 cells. Bound proteins were identified by mass spectrometry. The number of spectrum-to-sequence matches was translated into a heat map as a semi-quantitative indicator of the amount of protein captured.



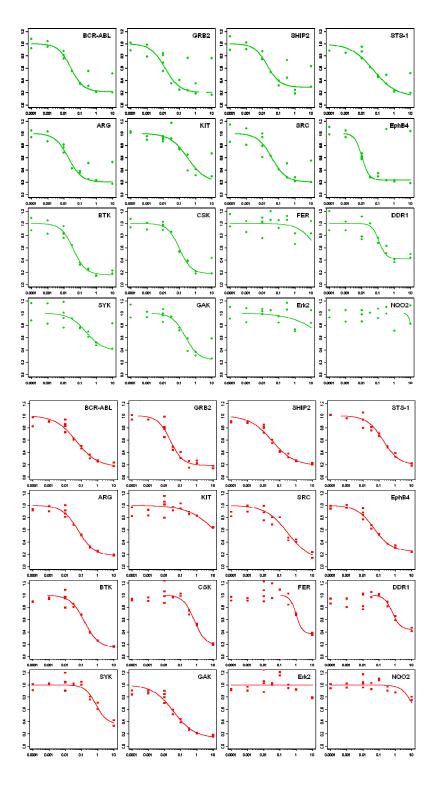
Supplementary Figure 2 iTRAQ-based quantification of the proteins captured on kinobeads.

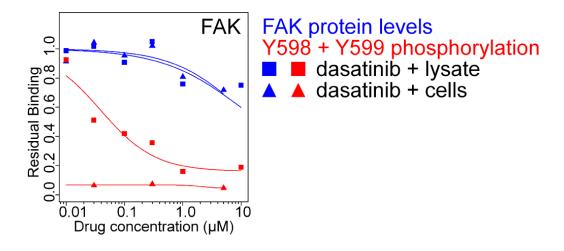
Distribution of iTRAQ areas for all proteins identified on kinobeads. Blue bars represent kinases, white bars represent non-kinases. According to **Table 1**, 13% of all proteins identified on kinobeads are protein kinases. However, when using the total iTRAQ ion area as a measure of protein quantity, it is interesting to note that 79% of the total protein is represented by protein kinases (blue bars) compared to 21% for other proteins



Supplementary Figure 3 Examples of competition binding curves calculated from iTRAQ reporter signals.

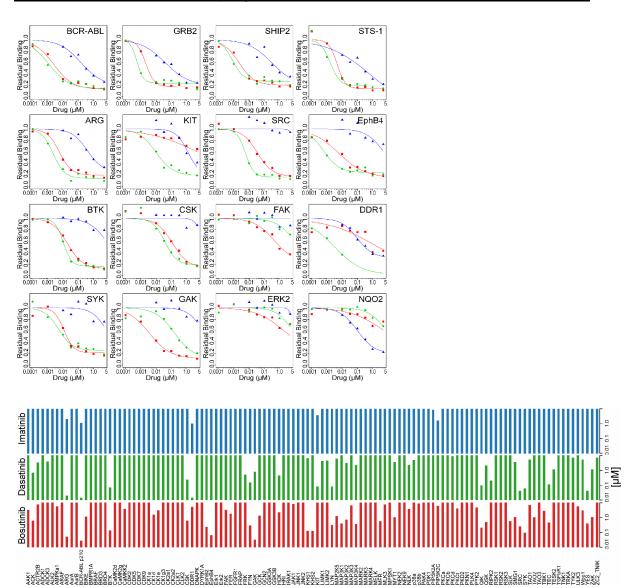
Binding of several known and novel targets to kinobeads is shown as dependent on the addition of imatinib (blue graphs), dasatinib (green graphs), or bosutinib (red graphs) to K562 cell lysate. Competition binding data were recorded from duplicate experiments (defined as two parallel compound treatments, carried out using the same batch of K52 cell lysate used throughout this study) over 6 different concentrations. In this figure, all replicated experiment are shown as separate points; curves were fitted to the averaged value of each duplicate, while the top of the curve was fixed to 1 (vehicle control).





Supplementary Figure 4 Focal adhesion kinase (FAK/PTK2) binds dasatinib only in an activated conformation.

The graphs show the dose-dependent reduction of regulatory phosphorylation sites in dasatinib-treated K562 cells (triangles) or lysates (squares) of a double-phosphorylated regulatory site on focal adhesion kinase (FAK). Whereas the FAK total protein level is only affected at high compound concentrations, a subset of FAK represented by phosphorylation on Y598/599 is affected when dasatinib was added to the lysate (red squares), and even more strongly affected when dasatinib was added to the cultured cells (red triangles).



Supplementary Figure 5 Proteomic target profiling of drugs in cultured cells by a kinobeads competition assay.

Upper panel: Examples of competition binding curves calculated from iTRAQ reporter signals. Binding of selected known and novel targets to kinobeads is shown as dependent on the treatment of K562 cells with imatinib (blue), dasatinib (green), and bosutinib (red) in culture, before cells are lysed. For each compound, three independent quadruplexed experiments (vehicle plus three compound concentrations each) were performed in duplicates, and iTRAQ reporter signal data were combined to display the dose response over 9 different concentrations.

Lower panel: Kinase binding profiles of the ABL kinase inhibitors imatinib (upper panel), dasatinib (middle panel), and bosutinib (bottom panel) across a set of protein kinases simultaneously identified from K562 cells treated with the drugs in culture. The bars indicate the IC50 values, defined as the concentration of drug at which half-maximal competition of kinobeads binding is observed.

Target profiling with immobilized kinase inhibitors

Target profile	ing with imm	obilized kinas	e inhibitors				(nown Targe		
Compound	Develop- ment status	Other names	Structure = site of attachment	Structure of analogue = site of attachment	Known Targets	Expressed in HeLa cells (Ref. 1)	Found in pulldown	Expressed in K562 cells (Ref. 1)	Found in pulldown
Bis-(III) Indolyl- maleimide	Research tool	2-[1-(3- Aminopropyl)- 1H-indol-3-yl]-3- (1H-indol-3- yl)maleimide	NH O NH		PKCs, GSK3	PKCα, PKCβ, PKCδ, PKCτ, GSK3α, GSK3β	PKCα, PKCβ, PKCδ, GSK3α, GSK3β	PKCα, PKCβ, PKCδ, PKCτ, GSK3α, GSK3β	PKCα, PKCβ, PKCτ, GSK3α, GSK3β
PD173955	pre-clinical		NH C	NH, NH, N, CI	Src family kinases, ABL	ABL, BRK, FRK, FYN, LCK, LYN, SRC, YES	ABL, BRK, FRK, FYN, LYN, YES		BCR-ABL, FYN, HCK, LYN, SRC, YES
Purvalanol B	Research tool	6-[(3- Chloro)anilino]- 2(1R)-(isopropyl- 2- hydroxyethylami no)-9- isopropylpurine	N OH		CDKs	CDK2, CDK3, CDK4, CDK5, CDK7, CDK8, CDK9, CDK11	CDK2, CDK3, CDK5, CDK7, CDK9,	CDK2, CDK5, CDK6, CDK7, CDK9, CDK10	CDK2, CDK5, CDK7
CZC8004	Research tool	(N*2*-(4-Amino- methyl-phenyl)- 5-Fluoro-N*4*- Phenyl- Pyrimidine-2,4- Diamine	NH NH NH		pan-kinase				
Vandetanib	Phase 3 clinical	ZD6474; Zactima® (Astra Zeneca)	NH NH NN N	NH NH	VEGFR, EGFR, RET	EGFR	EGFR		NA
Sunitinib	Marketed drug	SU-11248; Sutent® (Pfizer)	NH NH NH	NH NH F	VEGFR, PDGFR, FLT3, KIT	PDGFRb		КІТ	
Staurosporine	Research tool		NH O	NIT OF THE STATE O	pan-kinase				
Ro-320-1195	Phase 1 clinical		-NH	NH, NH,	p38	p38α, p38β, p38γ	p38α, p38β	p38α, p38β	p38α, p38β
Lapatinib	Marketed drug	GW-572016; Tykerb® (GSK)	OF NH		EGFR, Her-2	EGFR Her-2	EGFR Her-2		NA
Imatinib	Marketed drug	STI-571; Glivec®; Gleevec® (Novartis)			ABL, Kit, PDGFR	ABL, PDGFRb		BCR-ABL KIT	BCR-ABL KIT
Gefitinib	Marketed drug	ZD-1839; Iressa® (Astra Zeneca)		NH, NH	EGFR	EGFR	EGFR		NA
Pelitinib	Phase 2 clinical, development discontinued	EKB-569 (Wyeth)	NH NH	NH, NH, NH, CI	EGFR, Her-2	EGFR			NA

(Ref. 1) Su, A.I. et al.: Large-scale analysis of the human and mouse transcriptomes. Proc. Natl. Acad. Sci. U. S. A 99, 4465-4470 (2002).

Kinase binding profiles of individual immobilized tool compounds and drugs (data for **Supplementary Fig. 1**). The total number of peptide to spectrum matches (PSMs) are listed as obtained for individual kinases interacting with immobilized tool compounds and drugs. The following compounds or analogues thereof were immobilized: The research tool inhibitors 2-(1-(3-Aminopropyl)-indol-3-yl)-3-(1-methyl-indol-3-yl) maleimide (protein kinase C inhibitor), purvalanol B (cyclin-dependent kinase inhibitor), CZC8004 and staurosporine (pan-kinase inhibitors); and the drugs or drug candidates PD173955 (src kinase inhibitor), vandetanib (VEGFR, EGFR), sunitinib (VEGFR, PDGFR, Flt3, Kit), Ro 320-1195 (p38 MAP kinase), imatinib (Abl, PDGFR, Kit), gefitinib, (EGFR), pelitinib (EGFR), and lapatinib (EGFR, Her-2 inhibitor).

Family	Name	IPI acc. nr.	Bis-ir malein	ndolyl nide III		73955 ogue	Purval	lanol B		8004	Vande- tanib anal.	itinib anal.	Stauro- sporin e anal.	anal	01195 ogue		tinib ogue		itinib ogue	Peli- tinib anal.	Lapa- tinib anal.
			HeLa	K562	HeLa	KE63	HeLa	K562	N HeLa			um-to-s HeLa				HeLa	K562	HeLa	VE62	HeLa	HeLa
TK	ABL	IPI00221171	rieLa	N302	11eLa 2	211	2		пеца	46	Пеца	пеца	rieLa	пеца	N302	rieLa	54	пеца	N302	Пеца	пеца
TK	ACK	IPI00442025				12															
	ARG	IPI00329488			12	174	54	19									10				
	BLK	IPI00306217					4														
	BRK	IPI00015927			4			07		0.4	6										
TK TK	BTK CSK	IPI00029132 IPI00013212			30	238 105	8	37		34	10								5		
	DDR1	IPI00013212			30	12	- 0				10										
	EGFR	IPI00018274				12					51							3			251
	EphA2	IPI00021267			15		19														
TK	EphA5	IPI00008290					2														
	EphA7	IPI00016645				1	3														
	EphB1	IPI00008315	1				2		_												
	EphB2 EphB3	IPI00021275 IPI00289329	- '		5	1	15 6		3												
	EphB4	IPI00289342			18	69	52	4			7										
	FAK	IPI00413961				11	42	111	22	56											
TK	FER	IPI00029263				58	43	17	21	22		32	49							38	
	FGFR1	IPI00005142				3															
	FGR	IPI00016871					1														
TK TK	FRK FYN	IPI00000885 IPI00219012			3	10	17	5													
	HCK	IPI00219012			3	7	17	2													
	HER4/ErbB4	IPI00029769																			1
	IGF1R	IPI00027232					29		13	1											
TK	INSR	IPI00025803					40		10												
	JAK1	IPI00011633							45	12		120									
	KIT	IPI00022296				1	^-														
TK TK	LYN PYK2	IPI00298625 IPI00029702			34	91 13	87	57	5	7	36										
TK	SRC	IPI00029702 IPI00328867				21	6 7	24		1	1										
	SYK	IPI00018597				12	,	24													
	TEC	IPI00000878			1	43	10	24	15	39											
TK	TNK1	IPI00022633	53		12		18		123	10	38	35	100			5		4			
TK	TRKA	IPI00025076						5													
TK	TYK2	IPI00022353					20		49	25											
	YES	IPI00013981	4		110	136	390	34	117	16	160	88									
	ACTR2 ALK2	IPI00015691 IPI00029219			1	10															
	ARAF	IPI00023213				1															
	BMPR1A	IPI00005731				1															
	BRAF	IPI00303797			2	7															
	ILK	IPI00025644					33													34	
	LIMK2	IPI00022872				2	40														
	MLK3 RIPK2	IPI00000977 IPI00021917			21	66	12	5			126		1	6				161	172		
	TESK2	IPI00021917			21	3					120			6				101	172		
	TGFbR1	IPI00005733			11	8															
TKL	ZAK	IPI00329638			3																
	GCK	IPI00149094				2	2														
	KHS1	IPI00294842				19															
	MAP2K1 MAP2K2	IPI00219604 IPI00003783				1						21								25 1	
	MAP2K5	IPI00003763				6	1		1		4										
	MAP3K1	IPI00012318				12													3	31	
STE	MAP3K2	IPI00513803					1														
	MAP3K3	IPI00181703				1															
	MAP3K4	IPI00386260				82															
	MST1 PAK4	IPI00011488 IPI00014068					65	16				6									
	PAK5	IPI00014068					2														
	SLK	IPI00022827					2														
STE	TAO1	IPI00002232				1															
	TAO3	IPI00410485				5															
	CK1a	IPI00448798					12														
	CK1a2	IPI00167096					4														1
	CK1d CK1e	IPI00011102 IPI00027729					6 10														
	CK1g1	IPI00027729					8														
	CK1g2	IPI00297767					3														
CK1	CK1g3	IPI00218437					37	11													
AGC	MRCKa	IPI00640957							8												
	MSK2	IPI00022536					2					3									
	PDK1	IPI00002538											33								
	PKCa PKCb	IPI00385449 IPI00219628	4	16																	
	PKCb	IPI00219628 IPI00329236	4	10																	
	PKCg	IPI00329230					2														
	PKCt	IPI00029196		14																	
AGC	PKN3	IPI00413780				1															
	ROCK2	IPI00307155					3														
	RSK2	IPI00020898	3				12						2								
	RSK3 RSK4	IPI00477982					42	26													
MITI.		IPI00007123 IPI00655852					1														
	SGK3																				

Family	Name	IPI acc. nr.		ndolyl mide III	PD17 anal		Purval	anol B		8004	Vande- tanib anal.	itinib anal.	Stauro- sporin e anal.	anal	01195 ogue		tinib logue		itinib ogue	Peli- tinib anal.	Lapa- tinib anal.
			HeLa	K562	HeLa	K562	HeLa	K562	N HeLa			rum-to-s HeLa			es K562	اما م	VE62	HeLa	VEGO	HeLa	HeLa
CAMK	AMPKa2	IPI00307755	HELA	NOUZ	TICLA	1302	licta	11302	TIELA	NOUZ	HELA	1			11302	HELA	11302	rieLa	11002	rieLa	TieLa
CAMK	CHK1	IPI00023664	2																		
CAMK	CaMK2a	IPI00550056					1				16	140	5						13	1	
CAMK	CaMK2b	IPI00221305	2				3				3										
CAMK	CaMK2d	IPI00430291	24				121	1	36		4		37								
CAMK CAMK	CaMK2g DCaMKL3	IPI00169392 IPI00028196	28 1			1	122	51	91	28	3	182	59								
CAMK	MAPKAPK2	IPI00028190													19						
CAMK	MAPKAPK3	IPI00005777													20						
CAMK	MARK2	IPI00555838				16							59								
CAMK	MARK3	IPI00183118											3								
CAMK	MARK4	IPI00064797				1	•														
CAMK CAMK	MELK PHKg2	IPI00006471 IPI00012891					6 8					4									
CAMK	PKD2	IPI00012891				11	- 0					- 4									
CAMK	QIK	IPI00465291				23															
CAMK	QSK	IPI00657720				4															
CAMK	TTN	IPI00179357					8														
Other	AAK1	IPI00298977	5						121	44		96									
Other	AurA	IPI00298940			3	1	2		145	16	3										
Other Other	AurB BIKE	IPI00176642 IPI00337426					1		40 7	8 44	31	46 12									
Other	CK2a1	IPI00337426				9			10			12									
Other	CK2a1	IPI00010013				9			11	53											
Other	CaMKK1	IPI00166909								- 00			7								
Other	CaMKK2	IPI00290239					15	10					10								
Other	GAK	IPI00298949		1	30	267			35	21					17			6	27	109	
Other	GCN2	IPI00163851				2															
Other	HRI	IPI00328149				3							40								
Other Other	IKKe MPSK1	IPI00029045 IPI00306833			1		9		23 15	6		29	10								
Other	MYT1	IPI00300833			'	13	9		15	0											
Other	NEK2	IPI00021331				3						24									
Other	NEK9	IPI00301609					267	105	52	47		10				1					
Other	PLK1	IPI00021248					4														
Other	PLK4	IPI00410344							1		1		5								
Other	TBK1	IPI00293613				2	2		168	88		308	118							_	
Other Other	ULK3 Wee1	IPI00411818 IPI00025830				3 45	16 19	3	16 2	15 3		54								3	
CMGC	CDC2	IPI00025630	3			43	11	3		3						2			1		
CMGC	CDK2	IPI00031681	8				29	12	29												
CMGC	CDK3	IPI00023503	1				2														
CMGC	CDK5	IPI00023530					100	41											10		
CMGC	CDK7	IPI00000685					24	6													
CMGC	CDK9	IPI00552413					4	1													
CMGC CMGC	CLK1 CRK7	IPI00028061 IPI00021175					1	2													
CMGC	Erk1	IPI00021175			2	37	39												2		
CMGC	Erk2	IPI00003479		2		213	202	152			2	1						8			
CMGC	Erk7	IPI00165955		_			1														
CMGC	GSK3A	IPI00292228	166	88					75	7			13								
CMGC	GSK3B	IPI00216190	206	73					70	8			7								
CMGC	JNK1	IPI00024672			7	62			74	42		_							2		1
CMGC	JNK2	IPI00303550 IPI00023547			6	7			150	39		2						9	6 19		
CMGC CMGC	JNK3 NLK	IPI00023547				5	2											9	19		
CMGC	p38a	IPI00008237	3		31	69	2				5			71	80						
CMGC	p38b	IPI00019473	Ů		j	1									11						
Lipid Kinase	PIK3C2a	IPI00002580					1														
Lipid Kinase	PIP5K2C	IPI00152303			5																
	A6	IPI00183508	1																		
	ADCK3	IPI00176469	_		40	37	_														
	ATM ATR	IPI00298306 IPI00412298	<u>6</u>		16		3				1										6 7
	BCR	IPI00412298 IPI00004497	1			193	3			43	1						52				
	BRD3	IPI00004497				193			1	2							52				
	BRD4	IPI00440727								1											
	DNAPK	IPI00296337	472	242	277	290	346	49	63		218		1	48	82	5	381	7	31	14	281
Atypical	FRAP	IPI00513678	36				16		3		57						20				10
Atypical	PDHK3	IPI00014849									1										
	TRRAP	IPI00069084	2																		
	TIF1b	IPI00438229	1				3														

Destrict formit	0.17	Post in comme	Libi	I Mont				
Protein family	Subfamily	Protein name (Sugen nomenclature for kinases when available, rest from IPI)	IPI acc. no.	HeLa		trum-to-se Jurkat	K562	Ramos
Kinase	TK	ABL	IPI00221171	269	198	747	33	574
Kinase Kinase	TK TK	ACK ARG	IPI00442025 IPI00329488	200 942	44 81	81 501	129 788	423 823
Kinase	TK	BCR-ABL	NA	208	197		5159	36
Kinase	TK	BLK BMX	IPI00306217 IPI00020899		99	78	4	838
Kinase Kinase	TK TK	BRK	IPI00020899	99			4	
Kinase	TK	BTK	IPI00029132		239	10	2654	4167
Kinase Kinase	TK TK	CSK DDR1	IPI00013212 IPI00001477	1539 239	306 179		1686 84	1908 49
Kinase	TK	DDR2	IPI00004409		86		51	
Kinase	TK TK	EGFR EnhA4	IPI00018274 IPI00294250	148	497 162			
Kinase Kinase	TK	EphA1 EphA2	IPI00294250	851	241			
Kinase	TK	EphA3	IPI00298105	71	130			
Kinase Kinase	TK TK	EphA4 EphA5	IPI00008318 IPI00008290		26 22		3	
Kinase	TK	EphA7	IPI00016645		2			
Kinase	TK TK	EphB1	IPI00008315 IPI00021275	188	274	2 186	16 28	
Kinase Kinase	TK	EphB2 EphB3	IPI00021275	100	57	100	20	2
Kinase	TK	EphB4	IPI00289342	591	1299		408	2
Kinase Kinase	TK TK	EphB6 FAK	IPI00005222 IPI00413961	279	5 390		1021	227
Kinase	TK	FER	IPI00029263	330	271		258	128
Kinase	TK	FES FOER4	IPI00294344	19	427 40	46	82	
Kinase Kinase	TK TK	FGFR1 FGFR3	IPI00005142 IPI00220253	19	40	46	82	
Kinase	TK	FGFR4	IPI00304578	19				
Kinase Kinase	TK TK	FGR FLT3	IPI00016871 IPI00005722	 	71	5		44 11
Kinase	TK	FLT4	IPI00293565		364		12	
Kinase	TK	FMS FRK	IPI00011218	100	64 33		58	
Kinase Kinase	TK TK	FYN	IPI00000885 IPI00219012	99	78		159	
Kinase	TK	HCK	IPI00029769		187		61	
Kinase Kinase	TK TK	HER2/ErbB2 HER3/ErbB3	IPI00300384 IPI00298285	74	3			
Kinase	TK	IGF1R	IPI00027232	36	22			34
Kinase	TK	INSR ITK	IPI00025803	44	44		3	74
Kinase Kinase	TK TK	JAK1	IPI00004566 IPI00011633	506	374		304	2576
Kinase	TK	JAK2	IPI00031016	6		46	40	119
Kinase Kinase	TK TK	JAK3 KDR	IPI00219418 IPI00021396	7	72			16
Kinase	TK	KIT	IPI00022296		27		140	
Kinase	TK	LCK LYN	IPI00394952 IPI00298625	6 417	16 815		112 413	810 944
Kinase Kinase	TK TK	MER	IPI00298625	417	18		23	944
Kinase	TK	MET	IPI00294528	102	36			
Kinase Kinase	TK TK	PDGFRa PDGFRb	IPI00027721 IPI00015902	13	137 539	3		
Kinase	TK	PYK2	IPI00029702	68			852	2704
Kinase Kinase	TK TK	RON SRC	IPI00030273 IPI00328867	131 14	739	289	112	8
Kinase	TK	SYK	IPI00018597	14	57	6		203
Kinase	TK	TEC	IPI00000878	127	32	39	430	159
Kinase Kinase	TK TK	TIE2 TNK1	IPI00412829 IPI00022633	1332	151 6	1	175	
Kinase	TK	TRKA	IPI00025076				60	
Kinase Kinase	TK TK	TXK TYK2	IPI00000879 IPI00022353	302	21	509	227	540
Kinase	TK	YES	IPI00022333	1767	823	128	552	1
Kinase	TK	ZAP70	IPI00329789	400		74		
Kinase Kinase	TKL TKL	ACTR2 ACTR2B	IPI00015691 IPI00437565	102 16	26 23		8 26	
Kinase	TKL	ALK1	IPI00293271		3		6	
Kinase Kinase	TKL TKL	ALK2 ALK4	IPI00029219 IPI00005732	36 42			56 11	
Kinase	TKL	ARAF	IPI00003732	37			33	
Kinase	TKL	BMPR1A	IPI00005731	79	21	38	30	52
Kinase Kinase	TKL TKL	BMPR2 BRAF	IPI00221246 IPI00303797	16 137	53	2	20	19 40
Kinase	TKL	DLK	IPI00292181			33		4
Kinase Kinase	TKL TKL	ILK IRAK1	IPI00025644 IPI00293652	74 29		57 34	10 33	
Kinase	TKL	IRAK3	IPI00026984	29	24		- 33	29
Kinase	TKL	IRAK4	IPI00007641			2	3	
Kinase Kinase	TKL TKL	KSR1 LIMK1	IPI00514547 IPI00291702	55	42	111	49	
Kinase	TKL	LIMK2	IPI00022872	54			103	160
Kinase Kinase	TKL TKL	LRRK1 LRRK2	IPI00306522 IPI00175649		14		3 11	
Kinase	TKL	MLK1	IPI00179189	26		38	8	49
Kinase	TKL TKL	MLK3 MLK4	IPI00000977	89 1	20	50	37	25
Kinase Kinase	TKL	RAF1	IPI00142487 IPI00021786	1				
Kinase	TKL	RIPK2	IPI00021917	1151	237		343	
Kinase Kinase	TKL TKL	RIPK3 TESK1	IPI00294938 IPI00018182	8	5 12		8	74 25
Kinase	TKL	TESK2	IPI00102677		20	45	32	55
Kinase	TKL	TGFbR1	IPI00005733	169 21	238		79 19	
Kinase Kinase	TKL TKL	TGFbR2 ZAK	IPI00164934 IPI00329638	182	52 151	190	19 242	
Kinase	STE	GCK	IPI00149094	45	35	73	38	51
Kinase Kinase	STE STE	HPK1 KHS1	IPI00020258 IPI00294842	41	12 82		10 82	
Kinase	STE	KHS2	IPI00217024	32	38			3
Kinase	STE	LOK	IPI00304742		1			18
Kinase Kinase	STE STE	MAP2K1 MAP2K2	IPI00219604 IPI00003783	14 27	10		10 17	
Kinase	STE	MAP2K4	IPI00024674	1	18			
Kinase	STE	MAP2K5	IPI00185860	17			31	24
Kinase	STE STE	MAP3K1 MAP3K2	IPI00012318 IPI00513803	191 49	12 87		280 19	

The Company	Protein family	Subfamily	Protein name	IPI acc. no.	Numh	er of enec	rum-to-so	guence m	atches
State	1 Totell Lanling	Sublaining		ii i acc. no.					
STEEL MAPPER	Kinase Kinase								
STE	Kinase	STE	MAP3K5	IPI00412433	27			5	
STE	Kinase	STE	MAP3K7	IPI00412740	4			-	0.5
STE	Kinase Kinase	STE	MST2				39	4	25
STE	Kinase Kinase				_	163	116	105	105
STATE	Kinase	STE	PAK5	IPI00001814					2
Color	Kinase	STE	STLK5	IPI00300700	6		28		3
Columb	Kinase Kinase						81		86
Columb	Kinase Kinase				11	26			13
Columb	Kinase	STE	ZC2/TNIK	IPI00145805			4	49	- 2
Color	Kinase Kinase	CK1	CK1d	IPI00011102	5	5	2	27	44
Colored	Kinase Kinase				45	21			
AGE	Kinase	CK1	CK1g2	IPI00297767	20	42	4		
March Marc	Kinase	AGC	BARK1	IPI00012497	39	42		07	2
March Marc	Kinase Kinase					7			2
March Marc	Kinase Kinase							107	
March Marc	Kinase	AGC	PKCa	IPI00385449		114	78	15	
March	Kinase Kinase		PKCd		34				82
March Marc	Kinase Kinase					5		98	65
Gross	Kinase	AGC	PKG1	IPI00436355		67			
Grosse AGC	Kinase	AGC	PKN2	IPI00002804					13
Grosse	Kinase Kinase				16		5		
Grosse AGC	Kinase				20	15	2	22	
Grosse AGC	Kinase	AGC	RSK2	IPI00020898		39	73	61	
CAME	Kinase Kinase				211		197	301	196
General CAMK BRSKT PROD148000 13 12	Kinase Kinase					343	764	434	383
CAMPA	Kinase	CAMK	BRSK1	IPI00148020			13	12	
General CAMMC CAMMOD PRODUZEDE 3 5 12	Kinase	CAMK	CaMK1d	IPI00170508	32	1	12		71
Grane CAMR	Kinase Kinase						5	6	7 12
General CAMIK	Kinase Kinase								
Grisse CAMK CANK CHINT PRO002956 3 3 2 2 5 6 1 3 5 5 1 7 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Kinase	CAMK	CaMK4	IPI00430411		1030		000	
Ginse CAMK	Kinase Kinase				5		3	4	2
Ginse CAMK	Kinase Kinase						-		5 7
Ginase CAMK MAPKAPK2 Pi00026054 4 4	Kinase	CAMK	DRAK2	IPI00014934		-		1	13
Ginase CAMK MARK PIO018037 28	Kinase	CAMK	MAPKAPK2	IPI00026054				4	
Grisse CAMK MARKS PIO0183118 190 49 184 179 194	Kinase Kinase				28		2		
Grisse CAMK MARK4 PRODOGATY	Kinase Kinase								
Ginase CAMIK MNK1 IPI00304048 6 6 Ginase CAMIK PHM2 IPI0002891 12 4 2 Ginase CAMIK PHM1 IPI000090314 8 9 1 11 Ginase CAMIK PKD2 IPI00009834 18 19 38 30 70 Ginase CAMIK PKD3 IPI00005638 5 2 54 54 Ginase CAMIK OKK IPI000657720 62 119 158 219 722 Ginase CAMIK SIK IPI000657720 62 119 158 219 722 Ginase CAMIK SIMILCK IPI00413804 8 6 722 Ginase CAMIK SIMILCK IPI00413804 8 6 6 Ginase CAMIK SIMILCK IPI00413804 8 6 4 4 21 Ginase CMGC CDC2 IPI00	Kinase	CAMK	MARK4	IPI00064797			58	38	10
CAMIK	Kinase	CAMK	MNK1	IPI00304048			63	6	
Griase CAMIK PKD3 PI00115338 5	Kinase Kinase				12				21
CAMK	Kinase Kinase					19	38	30	70 54
Ginase CAMK SIK PI00025679 100	Kinase	CAMK	QIK	IPI00465291	29				
CAMK	Kinase	CAMK	SIK	IPI00025679			158	219	122
Cinase CMGC CDC2 PI00026689 26 3 8 13 25	Kinase Kinase					8	6		
Ginase	Kinase	CMGC	CDC2	IPI00026689			8	13	
Cinase CMGC CDK6 IPI0023529 17 5 10	Kinase	CMGC	CDK3	IPI00023503					4
CIMSE CMGC CDK9 IPI00552413 72 2 110 62 104	Kinase Kinase				230	125			
CMGC	Kinase Kinase								
Ginase CMGC CLK2 IPI0028071 3 26 12 30 Ginase CMGC CLK3 IPI00288986 2 2 Ginase CMGC CRK7 IPI00021175 15 16 2 8 Ginase CMGC DYRK1A IPI00014344 2 86 58 43 Ginase CMGC DYRK1B IPI00014344 2 86 58 43 Ginase CMGC DYRK1B IPI0000352 1 3 3 66 Ginase CMGC Erk1 IPI00018195 53 29 30 30 66 Ginase CMGC Erk1 IPI000034379 1086 1124 740 3170 1316 Ginase CMGC Erk3 IPI00003431 2 2 4 112 4 112 4 112 4 112 4 112 4 112 4 112 112 112	Kinase	CMGC	CDK10	IPI00014873					10
Kinase CMGC CRK7 IPI00021175 15 16 2 8 Ginase CMGC DYRK1A IPI00014344 2 86 58 43 Kinase CMGC DYRK1B IPI0000352 1 3 3 Kinase CMGC Erk1 IPI00018195 53 29 30 30 66 Kinase CMGC Erk2 IPI00003479 1086 1124 740 3170 1318 Kinase CMGC Erk3 IPI00003431 2 2 4 Kinase CMGC Erk5 IPI00165955 1 1 2 2 Kinase CMGC GSK3A IPI002982228 557 251 434 782 245 Kinase CMGC GSK3B IPI0021699 538 391 600 568 379 Kinase CMGC GSK3B IPI00214774 4 5 8 8 Kinase	Kinase	CMGC	CLK2	IPI00028071	3		26		
Kinase CMGC DYRK1A IPI00014344 2 86 58 43 Kinase CMGC DYRK1B IPI0000352 1 3 3	Kinase Kinase				15			2	8
Ginase CMGC Eirl IPI00018195 53 29 30 30 68 Ginase CMGC Erk2 IPI00003479 1086 1124 740 3170 1316 Ginase CMGC Erk3 IPI00003471 2 4 Ginase CMGC Erk5 IPI00219601 18 1 2 4 Ginase CMGC Erk7 IPI00169955 1 1 1 2 2 4 Ginase CMGC GSK3A IPI00292228 557 251 434 782 245 347 347 782 245 347 344 782 245 347 344 782 245 347 344 782 245 347 344 782 245 347 344 782 245 347 344 782 245 347 348 347 344 782 245 349 348 348 349 344<	Kinase	CMGC	DYRK1A		2		86	58	43
Kinase CMGC Erk3 IPI00003431 2 4 Kinase CMGC Erk5 IPI00169951 1 18 Kinase CMGC Erk7 IPI001699555 1 1 1 2 Kinase CMGC GSK3A3 IPI00292228 557 251 434 782 245 Kinase CMGC GSK3B3 IPI002199 538 391 600 588 379 Kinase CMGC HIPK1 IPI002147744 9 5 8 Kinase CMGC ICK IPI00181855 9 8 9 Kinase CMGC JNK1 IPI00224672 251 105 167 638 298 Kinase CMGC JNK2 IPI00303550 534 276 181 468 216 Kinase CMGC JNK3 IPI000323547 1 1 1 Kinase CMGC NLK IPI00008237 33 <t< td=""><td>Kinase</td><td>CMGC</td><td>Erk1</td><td>IPI00018195</td><td>53</td><td></td><td>30</td><td></td><td></td></t<>	Kinase	CMGC	Erk1	IPI00018195	53		30		
Kinase CMGC Erk7 IPID0165955 1 1 2 Ginase CMGC GSK3A IPID0292228 557 251 434 782 245 Kinase CMGC GSK3B IPID0216190 538 391 600 568 379 Kinase CMGC HIPK1 IPID01414744 5 5 8 Kinase CMGC ICK IPID0181855 9 8 8 Kinase CMGC JNK1 IPID0181855 9 8 8 Kinase CMGC JNK1 IPID0024672 251 105 167 638 298 Kinase CMGC JNK3 IPID0033550 534 276 181 468 216 Kinase CMGC JNK3 IPID00023547 1 1 1 1 1 1 1 1 1 1 1 1 4 1 1 1 1 1 1 <td>Kinase Kinase</td> <td></td> <td></td> <td></td> <td>1086</td> <td>1124</td> <td></td> <td>3170 4</td> <td>1316</td>	Kinase Kinase				1086	1124		3170 4	1316
Kinase CMGC GSK3A IPI00292228 557 251 434 782 245 Kinase CMGC GSK3B IPI00216190 538 391 600 568 379 Kinase CMGC HIPK1 IPI00141744 3 5 8 Kinase CMGC ICK IPI00191855 9 8 K Kinase CMGC JNK1 IPI0024672 251 105 167 638 298 Kinase CMGC JNK2 IPI00303550 534 276 181 468 216 Kinase CMGC JNK3 IPI000023547 1	Kinase				1				2
Kinase CMGC HIPK1 IPI001414744 5 8 Kinase CMGC ICK IPI00181855 9 8 Kinase CMGC JNK1 IPI00224672 251 105 167 638 298 Kinase CMGC JNK2 IPI00303550 534 276 181 468 216 Kinase CMGC JNK3 IPI000303550 534 276 181 468 216 Kinase CMGC NLK IPI00008237 33 90 134 45 Kinase CMGC D38a IPI00008257 1254 1084 969 1002 1407 Kinase CMGC D38b IPI00019473 9 24 14 26 8 Kinase CMGC PCTAIRE2 IPI00376955 - - 6 Kinase Alypical A6 IPI00178308 2 - - Kinase Alypical ADCK1	Kinase	CMGC	GSK3A	IPI00292228			434		
Kinase CMGC JINK1 IPI00024672 251 105 167 638 298 Kinase CMGC JNK2 IPI03033550 534 276 181 468 216 Kinase CMGC JNK3 IPI00023347 1 1 Kinase CMGC NLK IPI00002827 33 90 134 45 Kinase CMGC p38a IPI00002857 1254 1084 969 1002 1407 Kinase CMGC p38b IPI00019473 9 24 14 26 18 Kinase CMGC PCTAIRE2 IPI00376955 2 4 6 8 Kinase Alypical AB IPI00183508 2 2 6 11 5 Kinase Alypical ADCK1 IPI0047648 54 6 21 143 28	Kinase	CMGC	HIPK1	IPI00414744	538		5		3/9
Kinase CMGC JNIK2 IPI00303550 534 276 181 468 216 Kinase CMGC JNIK3 IPI000023547 1 1 45 44 45 45 46 42 44 45 45 44 45 46 48 41 40 48 41 26 8 41 42 8 41 42 8 41 42 8 41 42 48 41 42 48 41 42 48 41 42 48 41 42 48 41 42 48 41 42 48 41 42 48 41 42 48 41 42 48 41 42 48 41 42 48 41	Kinase Kinase				251			638	298
Kinase CMGC NLK IPI00008237 33 90 134 45 Kinase CMGC p38a IPI00002857 1254 1084 989 1002 1407 Kinase CMGC p38b IPI0019473 9 24 14 26 8 Kinase CMGC PCTAIRE2 IPI00376955 - 6 6 Kinase Atypical A6 IPI00183508 2 - - Kinase Atypical ADCK1 IPI00412099 21 2 6 11 5 Kinase Alypical ADCK3 IPI00176469 54 6 21 143 28	Kinase	CMGC	JNK2	IPI00303550		276			
Kinase CMGC 038b IPI00019473 9 24 14 26 8 Kinase CMGC PCTAIRE2 IPI00376955 - 6 6 1 <t< td=""><td>Kinase</td><td>CMGC</td><td>NLK</td><td>IPI00008237</td><td></td><td></td><td></td><td></td><td></td></t<>	Kinase	CMGC	NLK	IPI00008237					
Kinase CMGC PCTAIRE2 IPI00376955 6 Kinase Atypical A6 IPI00183508 2 Kinase Atypical ADCK1 IPI00412099 21 2 6 11 5 Kinase Atypical ADCK3 IPI00176469 54 6 21 143 28	Kinase Kinase								
Kinase Atypical ADCK1 IP100412099 21 2 6 11 5 Kinase Atypical ADCK3 IP100176469 54 6 21 143 28	Kinase	CMGC	PCTAIRE2	IPI00376955	2				6
	Kinase	Atypical	ADCK1	IPI00412099	21		-		
	Kinase Kinase						21		28

Protein family	Subfamily	Protein name	IPI acc. no.	Numb	or of cooc	trum-to-se	allonco m	otchoc
Protein family	Subtaining	(Sugen nomenclature for kinases when available, rest from IPI)	IFI acc. no.	HeLa	Placenta	Jurkat	K562	Ramos
Kinase Kinase	Atypical	ATM ATR	IPI00298306 IPI00412298	79 71	12	25 11	57 8	203 97
Kinase	Atypical Atypical	BCR	IPI00004497	64	4		20	6
Kinase Kinase	Atypical Atypical	BRD2 BRD3	IPI00014414 IPI00014266	13 12	11	23 34	20 39	17 5
Kinase Kinase	Atypical	BRD4 DNAPK	IPI00440727 IPI00296337	33 948	366	67 793	129 2098	142 1799
Kinase	Atypical Atypical	FRAP	IPI00513678	237	65	114	2098	1799
Kinase Kinase	Atypical Atypical	PDHK1 PDHK3	IPI00655704 IPI00014849	7		5	4	7 10
Kinase	Atypical	TRRAP	IPI00069084	,		72	49	42
Kinase Kinase	TIF1 Non-SUGEN	TIF1b BMPR2 SF	IPI00438229 IPI00027376	5 12	1	3 6	12 4	3
Kinase	Non-SUGEN	CDKL1	IPI00383161					2
Kinase Kinase	Non-SUGEN Non-SUGEN	CLK2P IPI00396447.2	IPI00643723 IPI00396447	5	2	3	5	4
Kinase Kinase	Non-SUGEN Non-SUGEN	LOC440332 MKNK2	IPI00455277 IPI00556585					7
Kinase	Non-SUGEN	RP11-535K18 3	IPI00217264					1
Kinase Kinase	Non-SUGEN Non-SUGEN	SIMILAR TO CASEIN KINASE I, DELTA ISOFORM. SIMILAR TO INTEGRAL MEMBRANE GLYCOPROTEIN GP210 P	IPI00234463 IPI00017837	1		5	30	8
Kinase	Non-SUGEN	SIMILAR TO MITOGEN-ACTIVA	IPI00087148					2
Kinase Kinase	Non-SUGEN Non-SUGEN	SPFH1 SPFH2	IPI00007940 IPI00026942		7		5	12
Kinase Kinase	Non-SUGEN Other	TFG AAK1	IPI00294619 IPI00298977	385	3 212	345	252	2
Kinase	Other	AurA	IPI00298940	688	212	126	170	302
Kinase Kinase	Other Other	AurB BIKE	IPI00176642 IPI00337426	174 77	35	148 94	135 345	98 434
Kinase	Other	CaMKK1	IPI00166909	62		18	2	
Kinase Kinase	Other Other	CaMKK2 CK2a1	IPI00290239 IPI00016613	79 48	36 12		93 116	155 125
Kinase	Other	CK2a2	IPI00020602	93	102	68	188	194
Kinase Kinase	Other Other	CLIK1L Fused	IPI00166098 IPI00235407	10		3	5	11
Kinase Kinase	Other Other	GAK GCN2	IPI00298949 IPI00163851	1425 102	910 20	2596 345	1476 99	2318 27
Kinase	Other	HRI	IPI00328149	58	20	40	35	36
Kinase Kinase	Other Other	IKKa IKKe	IPI00005104 IPI00029045	155	13	135	13	2 390
Kinase	Other	MPSK1	IPI00306833	21	12	10	23	18
Kinase Kinase	Other Other	MYT1 NEK1	IPI00384765 IPI00552585	58 19		67 18	142	74 48
Kinase	Other	NEK2 NEK6	IPI00021331	81 6		67	108	57
Kinase Kinase	Other Other	NEK7	IPI00396662 IPI00152658	-	10		1	1
Kinase Kinase	Other Other	NEK9 PIK3R4	IPI00301609 IPI00024006	1455 13	543	348	729	2279
Kinase	Other	PLK1	IPI00021248	8				15
Kinase Kinase	Other Other	PLK4 SqK223	IPI00410344 IPI00166578	38		22	27	45 338
Kinase	Other	TBK1	IPI00293613	1483	848	1823	1837	1809
Kinase Kinase	Other Other	TTK ULK3	IPI00151170 IPI00411818	79	30	55	65	31
Kinase Lipid Kinase	Other	Wee1 PIK3C2b	IPI00025830 IPI00292056	495 72	135 40	553 174	430 31	982
Lipid Kinase	-	PIK3Cb	IPI00031388	12	3	174	20	
Lipid Kinase Lipid Kinase	- -	PIK3Cd PIK3Cq	IPI00298410 IPI00292690				2	13
Lipid Kinase	-	PIK4Ca	IPI00070943		24	8	41	14
Lipid Kinase Lipid Kinase	-	PIP5K2A PIP5K2B	IPI00009688 IPI00216470	6			- /	12
Lipid Kinase Lipid Kinase	-	PIP5K2C SIMILAR TO PHOSPHOINOSITIDE-3-KINASE, CLASS 2, AL	IPI00152303 IPI00060352	66	1		8	20
Sugar kinase	-	FRAT1	IPI00023762		·	1		
Sugar kinase Sugar kinase	-	HK1 HK2	IPI00220665 IPI00102864	3	7	1	3	
Sugar kinase	-	HKDC1	IPI00414612	11		40	40	44
Sugar kinase Sugar kinase	-	PFKM	IPI00220617 IPI00465179	13 7	22	12	19 4	14 1
Sugar kinase Nucleotide kinase	-	PFKP AK2	IPI00009790 IPI00215901	36		39	24 11	17
Nucleotide kinase	-	CMPK	IPI00219953		3		3	3
Nucleotide kinase Nucleotide kinase	-	DCK NME2	IPI00020454 IPI00604590	37	7 14	58	63 33	126 29
Nucleotide kinase	-	TK1	IPI00299214	8			4	6
Nucleotide kinase Nucleotide kinase	-	TK2 UCK2	IPI00337439 IPI00065671	2	7	3	1	
Other kinase Other kinase	-	C21orf124 NAGK	IPI00013004 IPI00296526	65	195 12	15	42	37
Other kinase	-	PANK4	IPI00018946	1	12		5	
Other kinase Other kinase	-	PGK1 TGM2	IPI00169383 IPI00294578	6	41		16	4
Enzyme	GTPase	GBL	IPI00657689	11		2	9	13
Enzyme Enzyme	GTPase GTPase	RAN RHOA	IPI00643041 IPI00478231	10	16 10		11	14 4
Enzyme	GTPase	RHOB	IPI00000041		1			
Enzyme Enzyme	GTPase GTPase	RHOG RHOH	IPI00017342 IPI00018882		3	3		6
Enzyme Enzyme	GTPase Helicase	SIMILAR TO ADP-RIBOSYLATION FACTOR 4 (H. SAPIENS) ASCC3L1	IPI00013078 IPI00420014	11		1 6	10	5
Enzyme	Helicase	BAT1	IPI00328343			·	2	J
Enzyme Enzyme	Helicase Helicase	BTAF1 CHD8	IPI00024802 IPI00719073	7	-	6	5	18
Enzyme	Helicase	DDX1	IPI00293655	7		3	7	3
Enzyme Enzyme	Helicase Helicase	DDX3Y DDX5	IPI00215637 IPI00017617	22 19		13	3 5	2 13
Enzyme	Helicase	DDX17	IPI00651677	4	1	6	10	10
Enzyme Enzyme	Helicase Helicase	DDX20 DDX39	IPI00005904 IPI00644431	11 4	<u> </u>		3	10
Enzyme Enzyme	Helicase Helicase	DDX46 DDX48	IPI00329791 IPI00009328	3				2
Enzyme	Helicase	DHX9	IPI00215638					1
Enzyme Enzyme	Helicase Helicase	DHX15 DHX32	IPI00177366 IPI00644447	6	3	13	6	8
Enzyme	Helicase	DHX36	IPI00027415		J			2
Enzyme Enzyme	Helicase Helicase	EIF4A1 EIF4A2	IPI00386604 IPI00409717	3	-	1	12	4
Enzyme	Helicase	ERCC2	IPI00029728	102		94	189	63
Enzyme	Helicase	ERCC3	IPI00291364	10	İ	7	19	

Drotoin family	Cubfomily	Dratain name	IDI ass no	Numb	or of once	trum to oo	auonao m	otoboo
Protein family	Subfamily	Protein name (Sugen nomenclature for kinases when available, rest from IPI)	IPI acc. no.	HeLa	Placenta	trum-to-se Jurkat	K562	Ramos
Enzyme	Helicase	G3BP	IPI00012442	9		6	3	16
Enzyme Enzyme	Helicase Helicase	GTF2F2 LBA1	IPI00477686 IPI00307684	5			7	18
Enzyme Enzyme	Helicase Helicase	MOV10 RUVBL1	IPI00719207 IPI00021187	5		1	4	
Enzyme	Helicase	RUVBL2	IPI00009104	3			- 4	
Enzyme Enzyme	Helicase Helicase	SKIV2L2 SMARCA3	IPI00647217 IPI00339381					8
Enzyme	Helicase	SMARCA4	IPI00293426					4
Enzyme Enzyme	Helicase Helicase	XRCC5 XRCC6	IPI00220834 IPI00644712	11 5	5 5		20	7
Enzyme	Hydrolase	37500	IPI00014177		2			4
Enzyme Enzyme	Hydrolase Hydrolase	40057 ABCE1	IPI00412206 IPI00303207		5	4	2	3
Enzyme Enzyme	Hydrolase Hydrolase	ABHD3 ABHD14B	IPI00012409 IPI00063827		5	2	2	2
Enzyme	Hydrolase	ACAD10	IPI00418639	1	,	2	6	4
Enzyme Enzyme	Hydrolase Hydrolase	ACIN1 ACOT8	IPI00007334 IPI00298202	1				3
Enzyme	Hydrolase	ACP1	IPI00218847	1	5	4	10	10
Enzyme Enzyme	Hydrolase Hydrolase	ACY1L2 ACYP2	IPI00217852 IPI00216461	1		2	1	3
Enzyme	Hydrolase	ADAM12	IPI00415037		41			40
Enzyme Enzyme	Hydrolase Hydrolase	ADAM17 ADAMTS14	IPI00288894 IPI00219598					10
Enzyme	Hydrolase	ADAMTSL4 AFG3L2	IPI00374068	6	3	6	1	8
Enzyme Enzyme	Hydrolase Hydrolase	AHCY	IPI00001091 IPI00646823	2		ь	9	12
Enzyme	Hydrolase	AHCYL1	IPI00182938	5	1			2
Enzyme Enzyme	Hydrolase Hydrolase	AICDA ALPP	IPI00010186 IPI00007289	8				3
Enzyme Enzyme	Hydrolase Hydrolase	APEH APOBEC3C	IPI00337741 IPI00555878	3	3	5	6	5
Enzyme	Hydrolase	ARF4	IPI00215918		10		3	4
Enzyme Enzyme	Hydrolase Hydrolase	ARF5 ARG1	IPI00215919 IPI00398768		1	2		
Enzyme	Hydrolase	ARL8B	IPI00018871		7			
Enzyme Enzyme	Hydrolase Hydrolase	ASAH1 ATAD3B	IPI00418446 IPI00306048	8	6	24	12 7	37
Enzyme	Hydrolase	ATG4B	IPI00554458				·	2
Enzyme Enzyme	Hydrolase Hydrolase	ATP6 BLMH	IPI00552036 IPI00219575			1		3
Enzyme	Hydrolase	C1orf57	IPI00514501			3	400	
Enzyme Enzyme	Hydrolase Hydrolase	C17orf27 CAPN1	IPI00470478 IPI00011285	28	20 7		168	
Enzyme	Hydrolase	CAPN2	IPI00289758	9			3	
Enzyme Enzyme	Hydrolase Hydrolase	CAPN6 CAPNS1	IPI00002547 IPI00025084	2	26		5	
Enzyme	Hydrolase Hydrolase	CASP2 CASP3	IPI00291570 IPI00292140	2		- 1	1	1
Enzyme Enzyme	Hydrolase	CASP14	IPI00292140	4	1	1	-	16
Enzyme Enzyme	Hydrolase Hydrolase	CCT8 CDC42	IPI00302925 IPI00385447	11	6		7	10
Enzyme	Hydrolase	CDC91L1	IPI00026044		,	3	- 4	4
Enzyme Enzyme	Hydrolase Hydrolase	COG8	IPI00007060 IPI00027078				1	4
Enzyme	Hydrolase	CTSB	IPI00295741		5		3	2
Enzyme Enzyme	Hydrolase Hydrolase	CTSC CTSD	IPI00022810 IPI00011229	11	26		3 7	3
Enzyme	Hydrolase	CTSZ	IPI00002745		4		5	
Enzyme Enzyme	Hydrolase Hydrolase	DCTD DFFA	IPI00554705 IPI00010882				1	
Enzyme	Hydrolase	DLG1	IPI00218729		3			
Enzyme Enzyme	Hydrolase Hydrolase	DNM1 DNPEP	IPI00413140 IPI00015856		1		5	
Enzyme Enzyme	Hydrolase Hydrolase	DPP4 DPYSL2	IPI00018953 IPI00106642		10 21		1	- 1
Enzyme	Hydrolase	DUSP3	IPI00018671		1	U	'	
Enzyme Enzyme	Hydrolase Hydrolase	DUSP12 EFTUD2	IPI00009210 IPI00003519	2		1	4	
Enzyme	Hydrolase	EHD1	IPI00017184		8			5
Enzyme Enzyme	Hydrolase Hydrolase	EHD2 EML1	IPI00100980 IPI00550611		3			
Enzyme	Hydrolase	ENDOD1	IPI00001952		2			
Enzyme Enzyme	Hydrolase Hydrolase	ERCC5 EXOSC4	IPI00477535 IPI00218310	18 1		1	1	2
Enzyme	Hydrolase	FEN1	IPI00026215				2	3
Enzyme Enzyme	Hydrolase Hydrolase	FLJ11151 FLJ25084	IPI00305010 IPI00102281		6		1	1
Enzyme Enzyme	Hydrolase Hydrolase	FUCA1 GAA	IPI00299026 IPI00293088		2			
Enzyme	Hydrolase	GALC	IPI00008790		1		42	
Enzyme Enzyme	Hydrolase Hydrolase	GANAB GBE1	IPI00011454 IPI00296635	14	19	12	19	2
Enzyme	Hydrolase	GCS1	IPI00328170		9			
Enzyme Enzyme	Hydrolase Hydrolase	GDA GNA12	IPI00465184 IPI00328744	1	4			
Enzyme	Hydrolase	GNA13	IPI00290928					2
Enzyme Enzyme	Hydrolase Hydrolase	GNAI2 GNAI3	IPI00465121 IPI00220578		5			12
Enzyme Enzyme	Hydrolase Hydrolase	HAGH HARS2	IPI00003933 IPI00152692			4		
Enzyme	Hydrolase	HDHD3	IPI00009931			3		
Enzyme Enzyme	Hydrolase Hydrolase	HEXB HIBCH	IPI00647065 IPI00419802	1	3		2	
Enzyme	Hydrolase	HINT1	IPI00239077	6		10	10	8
Enzyme Enzyme	Hydrolase Hydrolase	HINT2 HM13	IPI00000335 IPI00220687	<u> </u>	<u> </u>			3
Enzyme	Hydrolase	HP	IPI00641737		6			
Enzyme Enzyme	Hydrolase Hydrolase	HPR HRSP12	IPI00607707 IPI00005038	1	2		1	
Enzyme	Hydrolase	HTRA2	IPI00001663	4		_	1	14
Enzyme Enzyme	Hydrolase Hydrolase	INPP4A INPP5D	IPI00645392 IPI00329213	1	1	6		4
Enzyme	Hydrolase	INPPL1	IPI00016932				265	
Enzyme Enzyme	Hydrolase Hydrolase	ISG20 ITPA	IPI00647246 IPI00018783			3		14
Enzyme	Hydrolase	KATNA1	IPI00013075			3	_	2
Enzyme Enzyme	Hydrolase Hydrolase	KIAA0195 KLKB1	IPI00431263 IPI00008558	32	1	3	5	33
•	*							

Destain family	Cubfomilu	Destain a see	I IDI ass as	Marianh				-4-b
Protein family	Subfamily	Protein name (Sugen nomenclature for kinases when available, rest from IPI)	IPI acc. no.	HeLa	Placenta	trum-to-se Jurkat	K562	Ramos
Enzyme	Hydrolase	KYNU	IPI00003818	1				
Enzyme Enzyme	Hydrolase Hydrolase	LGMN LNPEP	IPI00293303 IPI00307017		4 21			3
Enzyme	Hydrolase	LOC134147	IPI00383046	10			19	
Enzyme Enzyme	Hydrolase Hydrolase	LOC221955 LOC283871	IPI00385987 IPI00177008	2	2			
Enzyme	Hydrolase	LOC285148 LRAP	IPI00419194		5	6 5		12
Enzyme Enzyme	Hydrolase Hydrolase	LYPLA1	IPI00465261 IPI00007321		6	5	11	7
Enzyme Enzyme	Hydrolase Hydrolase	LYPLA2 LYZ	IPI00027032 IPI00019038	4	3	10	4	5
Enzyme	Hydrolase	MACF1	IPI00432363		3		67	11
Enzyme Enzyme	Hydrolase Hydrolase	MCM2 MCM3	IPI00184330 IPI00013214	4		17	4 11	10
Enzyme	Hydrolase	MCM4	IPI00018349	4			1	1
Enzyme Enzyme	Hydrolase Hydrolase	MCM5 MCM6	IPI00018350 IPI00031517	10 3		14	17 4	13
Enzyme	Hydrolase Hydrolase	MCM7 MDN1	IPI00299904 IPI00167941	9 202		15 181	7 225	13 201
Enzyme Enzyme	Hydrolase	MICROSOMAL SIGNAL PEPTIDASE 18 KDA SUBUNIT.	IPI00167941 IPI00104128			181	3	201
Enzyme Enzyme	Hydrolase Hydrolase	MSH6 NDUFS3	IPI00384456 IPI00174190	25	2		6	36
Enzyme	Hydrolase	NIT1	IPI00456664		2			
Enzyme Enzyme	Hydrolase Hydrolase	NPEPPS NRD1	IPI00026216 IPI00243221	3	5			4
Enzyme	Hydrolase	NT5DC2	IPI00009662			6	1	1
Enzyme Enzyme	Hydrolase Hydrolase	NTE NUDT1	IPI00640818 IPI00004392			12	3	10
Enzyme	Hydrolase	NUDT14 NUDT18	IPI00412878	40	46	15	10	4
Enzyme Enzyme	Hydrolase Hydrolase	OPA1	IPI00217911 IPI00107753	20	8 28		37	18
Enzyme Enzyme	Hydrolase Hydrolase	OSGEP OTUB1	IPI00015809 IPI00000581	6	5		5	2
Enzyme	Hydrolase	OTUB1	IPI00409750		2		3	
Enzyme Enzyme	Hydrolase Hydrolase	PAFAH1B2 PAPPA	IPI00026546 IPI00001869		1 9			
Enzyme	Hydrolase	PARG	IPI00470743				_	1
Enzyme Enzyme	Hydrolase Hydrolase	PGLS PGPEP1	IPI00029997 IPI00020539	4	5	5	5 1	6
Enzyme	Hydrolase Hydrolase	PHPT1 PIGS	IPI00299977 IPI00465308				1	
Enzyme Enzyme	Hydrolase	PIGT	IPI00100030			2		
Enzyme Enzyme	Hydrolase Hydrolase	PLCG2 PLD3	IPI00329185 IPI00328243		6			33
Enzyme	Hydrolase	PLGLB1	IPI00019580		32			
Enzyme Enzyme	Hydrolase Hydrolase	PMPCA PMPCB	IPI00166749 IPI00289535	1			3	
Enzyme	Hydrolase	POLD1	IPI00655631			3		4
Enzyme Enzyme	Hydrolase Hydrolase	PPA1 PPM1G	IPI00015018 IPI00006167	3		2	3	1
Enzyme Enzyme	Hydrolase Hydrolase	PPP1CA PPP1CB	IPI00027423 IPI00218236		11		3	7
Enzyme	Hydrolase	PPP1CC	IPI00218187	4			·	8
Enzyme Enzyme	Hydrolase Hydrolase	PPP2CA PPP3CB	IPI00008380 IPI00027809	7	7	5	8	27
Enzyme	Hydrolase	PPP5C	IPI00019812			4	_	- 10
Enzyme Enzyme	Hydrolase Hydrolase	PPP6C PPT1	IPI00012970 IPI00002412	9	1	2	5	16 1
Enzyme	Hydrolase Hydrolase	PRKAB1 PROTEASOME BETA 2 SUBUNIT VARIANT (FRAGMENT).	IPI00220409 IPI00555590	68	88	168	143	123
Enzyme Enzyme	Hydrolase	PRSS15	IPI00005158		·		5	
Enzyme Enzyme	Hydrolase Hydrolase	PSARL PSMA1	IPI00060545 IPI00472442	1 4	1	1 2	3	2
Enzyme	Hydrolase	PSMA2	IPI00219622	·			Ŭ	3
Enzyme Enzyme	Hydrolase Hydrolase	PSMA3 PSMA4	IPI00419249 IPI00639869	3	2	3	5	
Enzyme	Hydrolase Hydrolase	PSMA5 PSMA6	IPI00291922 IPI00029623	3	7	3 5	3	6
Enzyme Enzyme	Hydrolase	PSMA7	IPI00024175	4	4	7	7	2
Enzyme Enzyme	Hydrolase Hydrolase	PSMB1 PSMB2	IPI00025019 IPI00028006			5	8	3
Enzyme	Hydrolase	PSMB3	IPI00028004			J	4	
Enzyme Enzyme	Hydrolase Hydrolase	PSMB4 PSMB5	IPI00555956 IPI00375704		1 2	1	10	2
Enzyme	Hydrolase	PSMB5	IPI00383971	1				
Enzyme Enzyme	Hydrolase Hydrolase	PSMB6 PSMB7	IPI00000811 IPI00003217	2	2	1	1	2
Enzyme Enzyme	Hydrolase Hydrolase	PSMB8 PSMB9	IPI00000783 IPI00000787		1		1	4
Enzyme	Hydrolase	PSMC1	IPI00011126	3	·			
Enzyme Enzyme	Hydrolase Hydrolase	PSMC2 PSMC4	IPI00021435 IPI00020042	2	1		3	
Enzyme	Hydrolase	PSMC6	IPI00021926	_				5
Enzyme Enzyme	Hydrolase Hydrolase	PSMD6 PTER	IPI00655672 IPI00100933	5	3		3	3
Enzyme	Hydrolase	PTPN11	IPI00658023				2	
Enzyme Enzyme	Hydrolase Hydrolase	PTPN12 PTPN18	IPI00289082 IPI00219132		1	2	4	15
Enzyme Enzyme	Hydrolase Hydrolase	QPCT RAB3B	IPI00003919 IPI00300562		6			11
Enzyme	Hydrolase	RAB3D	IPI00032808		2			
Enzyme Enzyme	Hydrolase Hydrolase	RAB4B RAB5A	IPI00187143 IPI00023510	-	2		-	
Enzyme	Hydrolase	RAB5C	IPI00016339	3	8	4	6	2
Enzyme Enzyme	Hydrolase Hydrolase	RAB6A RAB7	IPI00217943 IPI00016342	-	7		-	
Enzyme	Hydrolase	RAB11B	IPI00020436		4		3	2
Enzyme Enzyme	Hydrolase Hydrolase	RAB14 RAB18	IPI00291928 IPI00556060		10 4		6	13
Enzyme	Hydrolase	RAB27A	IPI00016381		1		5	
Enzyme Enzyme	Hydrolase Hydrolase	RAB38 RAC1	IPI00027981 IPI00555566		14			
Enzyme Enzyme	Hydrolase Hydrolase	RAC2 RAD50	IPI00010270 IPI00549205	7		8 5		14
Enzyme	Hydrolase	RBBP4	IPI00328319	3		5	4	14
Enzyme Enzyme	Hydrolase Hydrolase	RCE1 RFC2	IPI00031755 IPI00017412			1		2
Enzyme	Hydrolase	RFC3	IPI00031521	4	1			
Enzyme Enzyme	Hydrolase Hydrolase	RFC4 RIF1	IPI00017381 IPI00477805					4 22
	j , ai oidoo	green a	100711000					. 22

Company	Drotoin family	Cubfomily	Drotoin name	IDI occ. no	Numb	or of once	trum to oo	auchee m	otoboo
Section	Protein family	Subfamily	Protein name (Sugen nomenclature for kinases when available, rest from IPI)	IPI acc. no.					
								2	
Medicane	Enzyme Enzyme	Hydrolase	RNPEP	IPI00642211	1			4	
Section	Enzyme Enzyme				4	1	6		7
Section	Enzyme	Hydrolase	SAR1A	IPI00015954		7	2		3
Proposed Enzyme	Hydrolase	SEC11L3	IPI00219436		,	3		5	
Processor	Enzyme Enzyme				7	2	2	3	1 2
Processor	Enzyme				1			4	6
Professional Prof	Enzyme	Hydrolase	ST14	IPI00001922		4			7
Total	Enzyme Enzyme					5			1
Process	Enzyme	Hydrolase		IPI00300376				3	1
Total	Enzyme Enzyme	Hydrolase	THOP1	IPI00549189	3				2
Processor	Enzyme Enzyme						7	9	14
Column	Enzyme	Hydrolase	TPP1	IPI00298237				1	
Columb	Enzyme Enzyme						4		4
Company	Enzyme Enzyme				3			4	7
March Marc	Enzyme	Hydrolase	USP7	IPI00003965			3		
Propose Propose Propose	Enzyme Enzyme				14	17			14
September Sept	Enzyme						5	4	4
Secure	Enzyme	Hydrolase	USP24	IPI00398505			6		
Security Enzyme Enzyme				3		8	5	63	
Propries Enzyme	Hydrolase	YME1L1	IPI00045946		_			5	
Exercise	Enzyme	Isomerase	DCI	IPI00300567				5	
Process Proc	Enzyme Enzyme				10	10	3		
PERPATE PRODUCTIONS 4 3 3 7 1 1 1 1 1 1 1 1 1	Enzyme	Isomerase	ERP29	IPI00024911	3	7			2
Somerase	Enzyme Enzyme				4	2		3	1
Somerane	Enzyme Enzyme					24			7
Engries Bonnerase TPK1	Enzyme	Isomerase	IDI1	IPI00220014	1				2
Encyme Somerase KAA0674 P900401282	Enzyme Enzyme				3	9			
Encyme Somerase MUTED P00171438 1	Enzyme				-				2
Engrows Somerase PDIAS PD00029205 4 37 1 5 1 1 1 1 1 1 1 1	Enzyme		MUTED	IPI00171438	1			4	5
Engyme Somerase PDIA4 PD000051479 2	Enzyme Enzyme								
Enzyme	Enzyme	Isomerase	PDIA4	IPI00009904	17	8		1	1
Enzyme Somerase PCAM1	Enzyme Enzyme				3			8	
Enzyme	Enzyme Enzyme							4	7
Enzyme Isomerase PIN4 PI000019723 2	Enzyme	Isomerase	PGM1	IPI00217872					
Enzyme Somerasse PPIA PIOQ480133 8 32 24 53 56	Enzyme Enzyme							-	9
Encyme Somerase PPIB PIOG648304 4 9 13 17 17 18 17 18 17 18 17 18 18	Enzyme Enzyme						Ŭ	-	
Enzyme (somerase PPIL1 PPI0007746 3 3 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Enzyme	Isomerase	PPIB	IPI00646304				13	17
Enzyme Isonerase	Enzyme Enzyme								
Enzyme Isonerase	Enzyme Enzyme							6	2
Enzyme Somerase SRPIA	Enzyme	Isomerase	PTGES	IPI00297858	1			·	
Enzyme Somerase SRR P100030228	Enzyme Enzyme					4	2	7	2
Enzyme Isomerase TPI	Enzyme Enzyme							1	
Enzyme Ligase AARS PI00027442 10	Enzyme	Isomerase	TPI1	IPI00465028	23	32	4	17	18
Enzyme Ligase ACACA PI00396015	Enzyme Enzyme							10	
Enzyme	Enzyme								
Enzyme	Enzyme	Ligase	ACSM3	IPI00297635	Ŭ			-	
Enzyme Ligase ANAPC4 PI00008251 19 17 16 10	Enzyme Enzyme						15	3	7
Ligase	Enzyme	Ligase							
Enzyme Ligase APPBP1	Enzyme	Ligase	ANAPC10	IPI00007088	51				13
Enzyme Ligase C20orf129 IPI00554777 2 18	Enzyme Enzyme					1		-	2
Enzyme Ligase CARS IPI00027443 6 3	Enzyme	Ligase	ASNS	IPI00554777			2	2	18
Enzyme Ligase CDC23 IPI00005822 24 28 26 26 Enzyme Ligase CTPS IPI00291142 12 22 3 13 Enzyme Ligase CTPS2 IPI00514016 3	Enzyme	Ligase	CARS	IPI00027443	3		3	-	3
Enzyme Ligase CTPS IPI00290142 12 22 3 13	Enzyme Enzyme				24		28		
Enzyme Ligase EDD1	Enzyme	Ligase	CTPS	IPI00290142	12				
Enzyme Ligase EDD1 IPI00026320 4 4 58 Enzyme Ligase ELOVL5 IPI0056024 4 4 33 Enzyme Ligase EPRS IPI00013452 111 4 32 52 50 Enzyme Ligase FARSLB IPI00001820 1 3 11 7 9 Enzyme Ligase FBXO2 IPI00479583 1 Enzyme Enzyme Ligase FBXW11 IPI00328796 1 4 4 4 4 4 6 15 2 11 4 4 1 4 4 1 4 4 6 15 2 1 1 4 4 6 15 2 1 1 4 4 3 3 1 5 2 1 4 4 3 3 1 1 4 4 3 2 2 1 1 1	Enzyme	Ligase	DARS	IPI00216951			10	-	
Enzyme Ligase EPRS IPI0013452 111 4 32 52 50	Enzyme Enzyme	Ligase			Α		1	4	
Enzyme Ligase FARSLB IPI00300074 4 6 15	Enzyme	Ligase	EPRS	IPI00013452			32		50
Enzyme Ligase FBXO2 IPI00479583 1	Enzyme	Ligase	FARSLB	IPI00300074	1				-
Enzyme Ligase GARS IPI00465260 12 11 19	Enzyme	Ligase	FBXO2	IPI00479583	1				
Enzyme Ligase HECTD3 IPI00456642 1 1	Enzyme	Ligase	GARS	IPI00465260	12			11	
Enzyme Ligase HIP2 IPI00021370 1 Enzyme Ligase HUWE1 IPI00456919 35 4 22 7 29 Enzyme Ligase IARS IPI0034127 30 3 17 28 39 Enzyme Ligase KARS IPI00307092 16 17 2 Enzyme Ligase LARS IPI00103994 13 6 21 13 Enzyme Ligase LARS2 IPI0014213 1 1 1 Enzyme Ligase LOC197322 IPI00166395 8 9	Enzyme Enzyme				5	2			1
Enzyme Ligase IARS IPI00644127 30 3 17 28 39 Enzyme Ligase KARS IPI00307092 16 17 2 Enzyme Ligase LARS IPI00103994 13 6 21 13 Enzyme Ligase LARS2 IPI0014273 1 1 1 Enzyme Ligase LOC197322 IPI00166395 8 9	Enzyme	Ligase	HIP2	IPI00021370	0.5		20	1	20
Enzyme Ligase LARS IPI00103994 13 6 21 13 Enzyme Ligase LARS2 IPI00014213 1 1 Enzyme Ligase LOC197322 IPI00166395 8 9	Enzyme	Ligase	IARS	IPI00644127	30	3	17	28	39
Enzyme Ligase LARS2 IP100014213 1 Enzyme Ligase LOC197322 IP100166395 8 9	Enzyme Enzyme								
	Enzyme	Ligase	LARS2	IPI00014213			-	1	
	Enzyme Enzyme						8		9

Destain family	Cultination	Destain ages	I IDI ass as	Nivente				
Protein family	Subfamily	Protein name (Sugen nomenclature for kinases when available, rest from IPI)	IPI acc. no.	HeLa	Placenta	trum-to-se Jurkat	K562	Ramos
Enzyme	Ligase	MARS	IPI00008240	14	2	21	20	22
Enzyme Enzyme	Ligase Ligase	MCCC2 MTHFD1L	IPI00412253 IPI00291646	2		6	14	8
Enzyme	Ligase	MYCBP2	IPI00289776	6		12		19
Enzyme Enzyme	Ligase Ligase	NADSYN1 NARS	IPI00306689 IPI00306960	1				4
Enzyme	Ligase	PARS2 PPIL2	IPI00553006 IPI00217324				4	
Enzyme Enzyme	Ligase Ligase	PRPS1	IPI00719564	3				4
Enzyme Enzyme	Ligase Ligase	PRPS2 QARS	IPI00718888 IPI00026665	1 19	6	3	15	12
Enzyme	Ligase	RARS	IPI00004860	10	2		4	2
Enzyme Enzyme	Ligase Ligase	RARSL RBAF600	IPI00549566 IPI00643014	24		16	76	3 22
Enzyme	Ligase	RNF5	IPI00012608			2	2	2
Enzyme Enzyme	Ligase Ligase	SLC27A4 SUCLG1	IPI00412147 IPI00295625	1	2	4	2	2
Enzyme	Ligase	SUCLG2 TARS	IPI00096066 IPI00329633	11			3 12	
Enzyme Enzyme	Ligase Ligase	TARSL1	IPI00604527	7			12	
Enzyme Enzyme	Ligase Ligase	TRAF7 UBE1	IPI00395631 IPI00645078	76	14	18	10	21
Enzyme	Ligase	UBE2C	IPI00013002					1
Enzyme Enzyme	Ligase Ligase	UBE2G2 UBE2I	IPI00010142 IPI00450472				3	1
Enzyme	Ligase	UBE2J1	IPI00477999					3
Enzyme Enzyme	Ligase Ligase	UBE2L3 UBE2L6	IPI00655957 IPI00329563		10	10	11 11	21
Enzyme	Ligase	UBE2M	IPI00022597				4	3
Enzyme Enzyme	Ligase Ligase	UBE2N UBE2NL	IPI00003949 IPI00376844	1	1	2	6	3
Enzyme	Ligase	UBE2O	IPI00028307	9	2			4
Enzyme Enzyme	Ligase Ligase	UBE2Z UBE3A	IPI00011996 IPI00011609	<u> </u>	2	5		1
Enzyme	Ligase	UBE4A UBR1	IPI00028957 IPI00217405	4		1 2		2
Enzyme Enzyme	Ligase Ligase	UBR2	IPI00217407	3		9		
Enzyme Enzymo	Ligase	UCHL1 VARS	IPI00018352 IPI00000873	q			13	8 15
Enzyme Enzyme	Ligase Ligase	WARS	IPI00295400	9	2		13	13
Enzyme Enzyme	Lyase Lyase	ACO2 ALAD	IPI00017855 IPI00442121		2		5	
Enzyme	Lyase	ALDOA	IPI00465439	9	g		17	13
Enzyme Enzyme	Lyase Lyase	C17orf25 CA1	IPI00032575 IPI00215983		6		2	2
Enzyme	Lyase	CA2	IPI00218414		2			
Enzyme Enzyme	Lyase Lyase	CBS CTH	IPI00219649 IPI00031557			1	7	13 1
Enzyme	Lyase	ECHS1	IPI00024993	3	4		3	
Enzyme Enzyme	Lyase Lyase	ENO1 FASN	IPI00465248 IPI00026781	18 105	18	36	31 91	11 143
Enzyme	Lyase	FECH	IPI00554589	81	15	118	297 5	49
Enzyme Enzyme	Lyase Lyase	FH GMDS	IPI00296053 IPI00030207	7	5	2	8	12
Enzyme	Lyase Lyase	HADHA HADHB	IPI00031522 IPI00022793	20	11		16 12	12
Enzyme Enzyme	Lyase	HCCS	IPI00023406	11	_	5	6	7
Enzyme Enzyme	Lyase Lyase	HMGCL KIDINS220	IPI00293564 IPI00033429	3	5		3	2 6
Enzyme	Lyase	LTC4S	IPI00004509	Ŭ	8			J
Enzyme Enzyme	Motor - dynein Motor - dynein	DYNC1H1 DYNC1I2	IPI00477531 IPI00302712	155	188	152	361 3	253 2
Enzyme	Motor - dynein	DYNLL2	IPI00019329	23	16	3	25	64
Enzyme Enzyme	Motor - dynein Motor - dynein	DYNLRB1 DYNLRB2	IPI00412497 IPI00178188				1	1
Enzyme	Motor - dynein	DYNLT1	IPI00019495				2	
Enzyme Enzyme	Motor - dynein Motor - kinesin	DYNLT3 KIF2C	IPI00639982 IPI00290435	1	2	5	6	5
Enzyme	Motor - kinesin Motor - kinesin	KIF4A KIF5B	IPI00178150 IPI00012837	2	10		4	6
Enzyme Enzyme	Motor - kinesin	KIF21A	IPI00425409	1	10	4	- 4	
Enzyme Enzyme	Motor - kinesin Motor - myosin	KIFC1 MYL4	IPI00306400 IPI00386712				1	1
Enzyme	Motor - myosin	MYL6	IPI00473069	6	6		2	9
Enzyme Enzyme	Motor - myosin Motor - myosin	MYL9 MYO9B	IPI00220278 IPI00336047		3			7
Enzyme	Motor - myosin	MYO15B	IPI00306532					3
Enzyme Enzyme	Motor - myosin Motor - other	SIMILAR TO MYOSIN REGULATORY LIGHT CHAIN-LIKE. CENPE	IPI00087597 IPI00296365			2		7
Enzyme	Motor - other Oxydoreductase	SMC1L1 ACAD8	IPI00291939 IPI00446874			1	2	3
Enzyme Enzyme	Oxydoreductase	ACAD9	IPI00446874				3	3
Enzyme Enzyme	Oxydoreductase Oxydoreductase	ACADS ACADVL	IPI00027701 IPI00028031	5	19			
Enzyme	Oxydoreductase	ACOX1	IPI00296907	J			7	
Enzyme Enzyme	Oxydoreductase Oxydoreductase	ACOX3 AKR1B1	IPI00020226 IPI00413641	81	425 12	166	132	41
Enzyme	Oxydoreductase	AKR1C3	IPI00641279	1				
Enzyme Enzyme	Oxydoreductase Oxydoreductase	ALDH2 ALDH3A2	IPI00006663 IPI00394758	9			5	
Enzyme	Oxydoreductase	ALDH7A1	IPI00221234		2			
Enzyme Enzyme	Oxydoreductase Oxydoreductase	ALDH18A1 AOC3	IPI00008982 IPI00004457		5		5	9
Enzyme	Oxydoreductase	BDH1	IPI00025341		40	5	-	9
Enzyme Enzyme	Oxydoreductase Oxydoreductase	BLVRB CBR1	IPI00219910 IPI00295386	7	10 11		8	
Enzyme Enzyme	Oxydoreductase Oxydoreductase	CBR4 CPOX	IPI00384297 IPI00093057		18	\vdash	F	2
Enzyme	Oxydoreductase	CYB5R1	IPI00470674		11		5	
Enzyme Enzyme	Oxydoreductase Oxydoreductase	CYB5R3	IPI00328415. IPI00465315		1			
Enzyme	Oxydoreductase	CYP2J2	IPI00019411	-	2			
Enzyme Enzyme	Oxydoreductase Oxydoreductase	CYP11A1 CYP19A1	IPI00295771 IPI00465065		43 21			
Enzyme	Oxydoreductase	CYTOCHROME C.	IPI00465315		2		8	1
Enzyme Enzyme	Oxydoreductase Oxydoreductase	DCXR DECR1	IPI00448095 IPI00003482	-	 	4	1 5	6 4
Enzyme	Oxydoreductase	DECR2	IPI00010190	10		7	J	7
Enzyme Enzyme	Oxydoreductase Oxydoreductase	DHCR7 DHRS1	IPI00294501 IPI00065063	37	2	8	5	26
	ONJUDIOUUDIASE	printer.	100000000			i		

Destain family	Cultanilu	Destain roma	I IDI ass as	Missaala	f	· · · · · · · · · · · · · · · · · · ·		-4-1
Protein family	Subfamily	Protein name (Sugen nomenclature for kinases when available, rest from IPI)	IPI acc. no.	HeLa	Placenta	trum-to-se Jurkat	quence ma K562	Ramos
Enzyme	Oxydoreductase	DHRS2	IPI00376377		3			
Enzyme Enzyme	Oxydoreductase Oxydoreductase	DHRS7B DLD	IPI00550165 IPI00015911		1		7	4
Enzyme	Oxydoreductase	DNAJC10	IPI00293260	11	16	24	36	47
Enzyme Enzyme	Oxydoreductase Oxydoreductase	ETFA	IPI00479733 IPI00010810		7	4	6	
Enzyme	Oxydoreductase	ETFB FADO4	IPI00556451		3		4	
Enzyme Enzyme	Oxydoreductase Oxydoreductase	FADS1 FADS2	IPI00396229 IPI00183786					6
Enzyme Enzyme	Oxydoreductase Oxydoreductase	FDFT1 FDX1	IPI00020944 IPI00019326	3	3	3	5	7
Enzyme	Oxydoreductase	FN1	IPI00339227		85			
Enzyme Enzyme	Oxydoreductase Oxydoreductase	FVT1 G6PD	IPI00029015 IPI00216008	7	3	10		
Enzyme	Oxydoreductase	GAPDH	IPI00219018	46	46		32	41
Enzyme Enzyme	Oxydoreductase Oxydoreductase	GCDH GLUD1	IPI00024317 IPI00016801	4			4	7
Enzyme	Oxydoreductase	GPD1L	IPI00032959	·	1			
Enzyme Enzyme	Oxydoreductase Oxydoreductase	GPD2 GSR	IPI00017895 IPI00016862	17	6		8	
Enzyme	Oxydoreductase	GSTO1	IPI00019755	Ū		3		
Enzyme Enzyme	Oxydoreductase Oxydoreductase	HADH2 HIBADH	IPI00017726 IPI00479966	5	16 5		4	24
Enzyme	Oxydoreductase	HMOX1	IPI00215893		1			
Enzyme Enzyme	Oxydoreductase Oxydoreductase	HMOX2 HSD11B2	IPI00026824 IPI00300050	5	31	4	1	6
Enzyme	Oxydoreductase	HSD17B1	IPI00719246		47			
Enzyme Enzyme	Oxydoreductase Oxydoreductase	HSD17B2 HSD17B12	IPI00019872 IPI00007676	8	15 6			7
Enzyme	Oxydoreductase	HSDL2	IPI00007070	4	U		3	2
Enzyme	Oxydoreductase Oxydoreductase	IDH1 IDH2	IPI00027223 IPI00011107	1		-	2	
Enzyme Enzyme	Oxydoreductase	IDH3A	IPI00030702				1	2
Enzyme Enzyme	Oxydoreductase Oxydoreductase	IPI00177674.1 JMJD1A	IPI00177674 IPI00479179	1	2			-
Enzyme Enzyme	Oxydoreductase	LDHA	IPI00217966	8	11		9	19
Enzyme	Oxydoreductase	LDHB	IPI00219217	8	3	_	9	14
Enzyme Enzyme	Oxydoreductase Oxydoreductase	LDHC LEPREL2	IPI00554498 IPI00217056		9		5	
Enzyme	Oxydoreductase	MAOA	IPI00008483 IPI00291005	4	16		5	
Enzyme Enzyme	Oxydoreductase Oxydoreductase	MDH1 MDH2	IPI00291005 IPI00291006	6	19		10	9
Enzyme	Oxydoreductase	MGC23280	IPI00059955					1
Enzyme Enzyme	Oxydoreductase Oxydoreductase	MSRB3 ND3	IPI00479793 IPI00071334		3		1	2
Enzyme	Oxydoreductase	ND4	IPI00008495					8
Enzyme Enzyme	Oxydoreductase Oxydoreductase	ND5 NDUFA4	IPI00008511 IPI00011770	2			3	5
Enzyme	Oxydoreductase	NDUFA5	IPI00412545	4		2	3	2
Enzyme Enzyme	Oxydoreductase Oxydoreductase	NDUFA8 NDUFA11	IPI00219034 IPI00329301			3	4	3
Enzyme	Oxydoreductase	NDUFA12	IPI00005966					3
Enzyme Enzyme	Oxydoreductase Oxydoreductase	NDUFA13 NDUFB4	IPI00219685 IPI00220059			1		3
Enzyme	Oxydoreductase	NDUFB5	IPI00013459					2
Enzyme Enzyme	Oxydoreductase Oxydoreductase	NDUFB9 NDUFB10	IPI00255052 IPI00479905			4	1	5
Enzyme	Oxydoreductase	NDUFB11	IPI00478450			1	1	3
Enzyme Enzyme	Oxydoreductase Oxydoreductase	NDUFS3 NDUFS7	IPI00025796 IPI00307749			4		
Enzyme	Oxydoreductase	NDUFS7	IPI00385965				2	4
Enzyme Enzyme	Oxydoreductase Oxydoreductase	NDUFS8 NOS3	IPI00010845 IPI00218845		8			1
Enzyme	Oxydoreductase	NQO1	IPI00012069 IPI00219129	61 1392	43	38 2445	69 4641	400
Enzyme Enzyme	Oxydoreductase Oxydoreductase	NQO2 P4HA1	IPI00219129 IPI00009923	1392	355	2445	4641	136 11
Enzyme	Oxydoreductase	PDCD8	IP100000690	5 41	3	7	17	8
Enzyme Enzyme	Oxydoreductase Oxydoreductase	PDHA1 PDHB	IPI00306301 IPI00003925	41	34	16 25	48 36	51 57
Enzyme Enzyme	Oxydoreductase Oxydoreductase	PGD PHGDH	IPI00219525 IPI00011200	12		9	6 17	40
Enzyme	Oxydoreductase	PNPO	IPI00011200 IPI00018272	12		9	17	12
Enzyme	Oxydoreductase	POR	IPI00470467	2	4		4	
Enzyme Enzyme	Oxydoreductase Oxydoreductase	PYCR1 PYCRL	IPI00550882 IPI00646105	2		2	2	4
Enzyme	Oxydoreductase Oxydoreductase	PYRROLINE 5-CARBOXYLATE REDUCTASE. RDH10	IPI00470610 IPI00218086		1		2	
Enzyme Enzyme	Oxydoreductase Oxydoreductase	RDH10 RDH11	IPI00339384		1	10		9
Enzyme Enzyme	Oxydoreductase Oxydoreductase	RDH13 RetSat	IPI00301204 IPI00296157	2	3			
Enzyme	Oxydoreductase	RRM1	IPI00013871	9			5	8
Enzyme Enzyme	Oxydoreductase Oxydoreductase	RRM2 RRM2B	IPI00011118 IPI00100213					7
Enzyme	Oxydoreductase	SC4MOL	IPI00019899			1		2
Enzyme Enzyme	Oxydoreductase Oxydoreductase	SDHA SDHB	IPI00305166 IPI00294911	4	15 3		13	25 7
Enzyme	Oxydoreductase	SEPX1	IPI00654889		3	3	1	/
Enzyme Enzyme	Oxydoreductase Oxydoreductase	SIMILAR TO CYTOCHROME C. SOD1	IPI00176698 IPI00218733		5	1	3	
Enzyme	Oxydoreductase	SOD2	IPI00022314		-		3	
Enzyme Enzyme	Oxydoreductase Oxydoreductase	SOD3 SPR	IPI00027827 IPI00017469	9	2		23	
Enzyme	Oxydoreductase	SQRDL	IPI00009634	1			23	
Enzyme Enzyme	Oxydoreductase Oxydoreductase	SRD5A2L TXN	IPI00002344 IPI00216298	16	9	8 14	15	11
Enzyme	Oxydoreductase	TXNDC	IPI00395887	5	2	27	26	11
Enzyme Enzyme	Oxydoreductase Oxydoreductase	TXNDC12 TXNL1	IPI00026328 IPI00642032		3		6	10
Enzyme	Oxydoreductase	TXNRD1	IPI00554786	2	4			10
Enzyme Enzyme	Oxydoreductase Oxydoreductase	UGDH VCL	IPI00031420 IPI00307162	4	13		-	
Enzyme Enzyme	Oxydoreductase Oxydoreductase	VKORC1	IPI00307162 IPI00166079		13		1	7
Enzyme	Oxydoreductase Oxydoreductase	VKORC1 YWHAB	IPI00644735 IPI00216318	28	27	1 41	49	86
Enzyme Enzyme	Peptidase Peptidase	MEST Technology	IPI00216318 IPI00298947	28	9		49	86
Enzyme	Peroxidase Peroxidase	CAT	IPI00465436	4	7			9
Enzyme Enzyme	Peroxidase Peroxidase	GPX1 GPX4	IPI00293975 IPI00304814		4			
Enzyme	Peroxidase	GPX7	IPI00045798		5			
Enzyme	Peroxidase	MGST3	IPI00639812	1	13	l	2	3

Company	Destain family	Cultiformille	Ductoin a cons	LIDI ann ma	Niveed	f	· · · · · · · · · · · · · · · · · · ·		-4-b
Section	Protein family	Subfamily	Protein name (Sugen nomenclature for kinases when available, rest from IPI)	IPI acc. no.					
Proceedings	Enzyme				rioza	108		50	49
Panel	Enzyme Enzyme						7		12
Processed Proc	Enzyme	Peroxidase	PRDX4	IPI00011937	21	11	7	6	12
Secondary Proceedings	Enzyme Enzyme				3				11
Proceedings	Enzyme	Peroxidase	PTGS1	IPI00298267	-			4	
Pace	Enzyme Enzyme				7		12		7
Paper	Enzyme	Peroxidase	SAPS3	IPI00719725	5				
Processed Color	Enzyme Enzyme							9	8
PROSECT PROSECT SEE	Enzyme	Protease	C7	IPI00296608		2			
Product	Enzyme Enzyme								
Company	Enzyme	Protease	C8G	IPI00011261		6			
Transferance	Enzyme Enzyme				8	16			
Transferance	Enzyme	Transferase	AASDHPPT	IPI00250297	Ů				2
Total State Common	Enzyme Enzyme								
Transference	Enzyme	Transferase	ACAT2	IPI00291419	2				
Transference	Enzyme Enzyme				2		3	4	
Transference	Enzyme		AGPAT5		_	1			
Providence ALCO	Enzyme Enzymo				2	2	2		3
Transference	Enzyme				3	3	-		4
Teachers	Enzyme					-		1	6
Tourière APPER PRODUCTO 1 1 1 1 1 1 1 1 1	Enzyme Enzyme							5	15 14
Teachers	Enzyme		ANP32B		14			11	9
Touridenses	Enzyme Enzyme				<u> </u>				3
Transference	Enzyme	Transferase	AYTL2	IPI00171626	3		2	1	1
Transferase SON	Enzyme Enzyme				1			5	2 11
Transferance C21612	Enzyme	Transferase	BGN	IPI00010790				Ŭ	
Page	Enzyme Enzyme				3	3	-		13
Transferance CISY1	Enzyme	Transferase	CDS2	IPI00032150		5			1
Transferance CNP	Enzyme Enzyme								3
Transferance CAAS	Enzyme						1		
Engine	Enzyme Enzymo				2	1		5	
Engine	Enzyme					-			3
Common	Enzyme					-		40	3
Engrow	Enzyme Enzyme				18	-		10	3
Engrown	Enzyme				6	12	8		27
Processor Proc	Enzyme Enzyme				1	2	2		3
Proposition Processes Pr	Enzyme	Transferase	DC2	IPI00414361	2			3	6
PRODUCTION PRO									
Transferase OKZZPS68A0522 PI00023200 2 1 1 1 1 1 1 1 1 1	Enzyme	Transferase	DDOST	IPI00297084			3		3
Transferase						2		15	1
Transferase	Enzyme	Transferase	DLAT	IPI00604707	74	65	182	199	97
Finance	Enzyme Enzyme				4	3	2	4	8
Enzyme	Enzyme	Transferase	ELOVL5	IPI00647062	·	J	Ü	2	
Enzyme Transferase FBL PRO025039 6 5 5 5 5 5 5 5 5 5	Enzyme Enzyme				4	44		1	
Transferase	Enzyme	Transferase	FBL	IPI00025039					9
Transferase	Enzyme Enzyme				1				3
Transferase	Enzyme	Transferase	FLII	IPI00031023	5				5
Transferase	Enzyme Enzyme						1	6	1
Transferase	Enzyme	Handidado		IPI00023729	3				
Transferase	Enzyme				83	163	22	22	28
Transferase GALNT2	Enzyme	Transferase	FUT8	IPI00004668					7
Transferase GNPAT IPI00005677 1	Enzyme Enzyme					24		7	2
Transferase GSTM3	Enzyme	Transferase	GNPAT	IPI00005677		21	1		1
Transferase	Enzyme				44			7	2
Transferase	Enzyme Enzyme				11			12	17
Transferase	Enzyme	Transferase	HAT1				1	3	2
Transferase	Enzyme Enzyme				3			8	17 4
Transferase	Enzyme	Transferase	HS2ST1	IPI00549891			_		3
Transferase	Enzyme Enzyme				1				3
Transferase	Enzyme	Transferase	ILVBL	IPI00554541		13			4
Transferase	Enzyme Enzyme				3	6	-	3	5
Transferase	Enzyme	Transferase	LRRC47	IPI00170935			4		2
Transferase	Enzyme Enzyme				14	8		7	8
Transferase MATZA	Enzyme	Transferase	LUM	IPI00020986		3			
Transferase	Enzyme Enzyme				2			2	2
Transferase MGMT IPI00/28618 7 6	Enzyme	Transferase	MGC5297	IPI00031696	3			Ĭ	J
Transferase	Enzyme Enzyme				7	2	13	13	17
Transferase MMAB IPI00029665 1	Enzyme Enzyme		MGST1						4
Transferase MPP1	Enzyme	Transferase	MMAB	IPI00029665	_				1
Enzyme Transferase MTAP IPI00011876 103 69 12 Enzyme Transferase MULK IPI00019353 2 1 4 7 Enzyme Transferase MYBBP1A IPI00607584 11 1 Enzyme Transferase NMT1 IPI00329692 3 2 Enzyme Transferase NP IPI00017672 3 5 4 3 Enzyme Transferase OACT1 IPI00374294 1 3	Enzyme Enzyme				5	5			
nzyme Transferase MYBBP1A IPI00607584 11 nzyme Transferase NMT1 IPI00329692 3 2 nzyme Transferase NP IPI00017672 3 5 4 3 nzyme Transferase OACT1 IPI00374294 1 3	Enzyme	Transferase	MTAP	IPI00011876	103	69			12
nzyme Transferase NMT1 IP100329692 3 2 nzyme Transferase NP IP100017672 3 5 4 3 nzyme Transferase OACT1 IP100374294 1 3	Enzyme Enzyme				11	-	1	4	7
Enzyme Transferase OACT1 IP100374294 1 3	Enzyme	Transferase	NMT1	IPI00329692					2
	Enzyme Enzyme				3	5	1		3
	Enzyme				8	26	1		6

Company	Destain family	Cubfomilu	Destain name	IPI acc. no. Number of s		f	····		-4-b
September Sept	Protein family	Subiamily		IPI acc. no.					
Tendence	Enzyme							1	
Target	Enzyme Enzyme				2		2		2
Translated	Enzyme Enzyme				19		17	24	15
Tanabasa	Enzyme	Transferase	PCMT1	IPI00411680		4			6
Control	Enzyme Enzyme				-		10	4	12
Tankbase	Enzyme	Transferase	PDHX	IPI00298423	25	7	11	44	
Content	Enzyme Enzyme					18		3	70
Tankbase	Enzyme	Transferase	PIGH	IPI00005263		2	3	2	2
Property Company Com	Enzyme Enzyme				29	15	11	8	37
Processor Proceedings	Enzyme Enzyme							2	2
Transference	Enzyme	Transferase	POLR1D	IPI00032439				1	
Professor Professor Part Professor Part Professor Part P	Enzyme Enzyme				5		8	2	
Transference	Enzyme	Transferase	POLR2H	IPI00003309	5		2	2	3
Transfered	Enzyme Enzyme				194	128	268	249	215
Section	Enzyme				40	40		7	2
Section	Enzyme Enzyme				12		8	- /	26
Section	Enzyme Enzymo				5				3
Topolegas SPIT	Enzyme	Transferase	RLTPR	IPI00456628					3
Procedure Proc	Enzyme Enzyme				15	38	32	13	1 22
Tenderates St. April	Enzyme	Transferase	RPN2	IPI00301271		11	11	2	9
System	Enzyme Enzyme				75	39			16
Transferance SMALE TO ATP SYNTHASS GAMMA CHAIN MITOCRONDRIA P00044474	Enzyme	Transferase	SCRIB	IPI00410666	5			_	
Transferance Spirit Proposition Prop	Enzyme Enzyme	Transferase	SIMILAR TO ATP SYNTHASE GAMMA CHAIN, MITOCHONDRIA	IPI00244574					3
System	Enzyme Enzymo				Ÿ		2		
Property Enzyme	Transferase	SNRPA1	IPI00183920	5		_	4	3	
Server	Enzyme Enzyme							3 7	9
Programs	Enzyme	Transferase	SPTLC2	IPI00005751		-			22
Profession	Enzyme Enzyme				1	25	Ü		5
Transferance Transferance TAMEP PRO00598672 77 2 90 27 4 4 4 5 5 5 4 5 5 5	Enzyme					-			
Programs	Enzyme Enzyme				17				45
Transferase TRMT	Enzyme Enzyme				3	-		4	38
Transferase	Enzyme	Transferase	TKT	IPI00021716					4
Transferase TusCa3	Enzyme Enzyme				3			1	5
Income	Enzyme	Transferase	TUSC3	IPI00013328		4			
Propriet Properties UGCGL1 Properties Propertie	Enzyme Enzyme				3				2
	Enzyme					25	25	6	17
Propriet Transferase ZOSHAV1 PROD4 10071	Enzyme	Transferase	UPP1	IPI00004406	13	9		·	- 17
Property Enzyme Enzyme					5		1		
	Enzyme	Transferase	ZDHHC17	IPI00410687				·	1
Properties Pro	Enzyme Enzyme				3	9	3	5	
Prosphodesterase	Enzyme				7	10	6	4	8
Prosphodelsterase	Enzyme	Phosphatase	TENC1	IPI00550368		24			J
Prosphodesterase	Enzyme Enzyme				11	5			
Prosphodiesterase PDEA PID002973 32 1702796 13 5 4 1702796	Enzyme	Phosphodiesterase	MGC5139	IPI00414629		-			33
Pinzyme Phosphodiesterase PDETA Enzyme Enzyme				4	3		32		
Pinzyme Phosphodiesterase PDETB	Enzyme				5	13	5	4	13
Phosphodiesterase SAMH-D1 IPI00294739 2	Enzyme			IPI00619901		2			
Pinosphodiesterase UNC119 Pinosphodiesterase UNC119 Pinosphodiesterase Ubiquirinylation ANAPC1 Pinosphodiesterase Disquirinylation ANAPC1 Pinosphodiesterase ANAPC	Enzyme Enzyme				307				1
Incyme Ubiquitinylation ANAPCT IPI00008248 23 13 12 22 22 23 23 13 1	Enzyme	Phosphodiesterase	UNC119	IPI00013262		-	54		28
Income	Enzyme Enzyme								55 22
Inzyme	Enzyme							1	
Dispute	Enzyme Enzyme						1		1
Internation Disquitinylation PSMD4 IPI00216247	Enzyme				1	3	1	6	13
Internation Disquitinylation PSMD10 IPI0003565 2 3 3 3 3 3 3 3 3 3	Enzyme	Ubiquitinylation	PSMD4	IPI00216247	-			3	13
Incyme	Enzyme Enzyme				6			3	
Disputinylation PSMD13 IPI00375380	Enzyme	Ubiquitinylation	PSMD11	IPI00105598		_		5	3
leaf Shock Proteins CRYAB	Enzyme Enzyme				3	-			2
Intent Shock Proteins DERL3 IPI00398647 IPI00298847 12 6 16 16 17	Heat Shock Proteins	-				17			
leat Shock Proteins - DNAJA1 IPI0012535 13 15 8 12 12 12 12 12 12 12	Heat Shock Proteins	-	DERL3	IPI00430407			·		1
leat Shock Proteins - DNAJB2 IPI0015948 1	Heat Shock Proteins	-			40	12			13 17
leat Shock Proteins HsPA1A	Heat Shock Proteins	-	DNAJB2	IPI00015948	13	1		8	
leat Shock Proteins - HSPA2 IPI00007702 3 26	Heat Shock Proteins Heat Shock Proteins	-			116	46	_	Q/I	5 42
Leat Shock Proteins - HSPA4L IPI00295485 2	Heat Shock Proteins	-	HSPA2	IPI00007702	3				72
leat Shock Proteins - HSPA6 IPI00339269 1	Heat Shock Proteins Heat Shock Proteins	- -			3		3		2
leat Shock Proteins - HSPB1	Heat Shock Proteins	-	HSPA6	IPI00339269	001		000	001	1
leat Shock Proteins - HSPCA IPI00382470 82 104 49 52 56 leat Shock Proteins - HSPCB IPI00414676 101 72 90 110 98 leat Shock Proteins - HSPD1 IPI00472102 44 18 38 40 44 leat Shock Proteins - HSPE1 IPI00220362 4 15 15 15	Heat Shock Proteins Heat Shock Proteins								214 17
leat Shock Proteins - HSPCB	Heat Shock Proteins	- -			92			E2	56
leat Shock Proteins - HSPE1 IP100220362 4 15 5	Heat Shock Proteins	-	HSPCB	IPI00414676	101	72	90	110	99
	Heat Shock Proteins	-				18	38		41
	Heat Shock Proteins	-			4		7		5

Protein family	Subfamily	Protein name	IPI acc. no.	Numb	er of spec	trum-to-se	equence m	atches
		(Sugen nomenclature for kinases when available, rest from IPI)		HeLa	Placenta	Jurkat	K562	Ramos
Heat Shock Proteins Heat Shock Proteins	-	PTMA SERPINH1	IPI00385149 IPI00032140	6			15	
Heat Shock Proteins	-	SERPINH1	IPI00442080		1			
Heat Shock Proteins Heat Shock Proteins	-	SIMILAR TO 60 KDA HEAT SHOCK PROTEIN, MITOCHONDRI SIMILAR TO CDC37 HOMOLOG.	IPI00413048 IPI00259127					
Heat Shock Proteins Heat Shock Proteins	-	SIMILAR TO HEAT SHOCK 70KD PROTEIN 9B (MORTALIN-2 SIMILAR TO HEAT SHOCK 70KD PROTEIN BINDING PROTEI	IPI00096692 IPI00107552				4	
Heat Shock Proteins	-	SIMILAR TO HEAT SHOCK COGNATE 71 KDA PROTEIN.	IPI00258419	1		1	5	
Heat Shock Proteins Heat Shock Proteins	-	STIP1 TOR1A	IPI00013894 IPI00477657		2		13	- :
Heat Shock Proteins	-	TXNDC4	IPI00401264				3	
	ER protein folding ER protein folding	CANX ORMDL1	IPI00020984 IPI00009364	8	23	2	2	
Heat Shock Proteins	ER protein folding	ORMDL2 ORMDL3	IPI00171701 IPI00166066	2	5	1		
Nucleic acid binding	ER protein folding Purine metabolism	ACLY	IPI00021290	16		14	12	
	Purine metabolism Purine metabolism	ADA ADK	IPI00296441 IPI00290279	82	248	11 51		30
Nucleic acid binding	Purine metabolism	APRT	IPI00218693		6	3	8	
	Purine metabolism Purine metabolism	ATIC GART	IPI00289499 IPI00025273	5		16		
Nucleic acid binding	Purine metabolism	GMPS HPRT1	IPI00029079	18		9		
	Purine metabolism Purine metabolism	IMPDH2	IPI00513722 IPI00291510	1	. 3	Ę	3	
	Purine metabolism Purine metabolism	MTHFD1 NMF1	IPI00218342 IPI00375531	9		28		
Nucleic acid binding	Purine metabolism	NME1-NME2	IPI00604590	19		18	3	
	Purine metabolism Purine metabolism	NME3 NME4	IPI00012315 IPI00658182	4 15	51 102	28	9	
Nucleic acid binding	Purine metabolism	PAICS	IPI00217223	71	.,-	17	35	46
	Purine metabolism Purine metabolism	PFAS PPAT	IPI00004534 IPI00029534	2			<u> </u>	
Nucleic acid binding	Purine metabolism	SMEK2 CAD	IPI00414323 IPI00301263	396	18	659		1228
Nucleic acid binding	Pyrimidine metabolism Pyrimidine metabolism	CDA	IPI00027983	4	18		4/9	1220
	Pyrimidine metabolism Pyrimidine metabolism	CPS1 DUT	IPI00011062 IPI00013679	115	3	19	15	52
Nucleic acid binding	Pyrimidine metabolism	ERH	IPI00029631					
	Pyrimidine metabolism Receptor activity	FLJ32942 ARF3	IPI00218505 IPI00215917		8		2	
Nucleic acid binding	Receptor activity	G3BP2 20 KDA PROTEIN.	IPI00009057	3				
	Ribosomal protein Ribosomal protein	40S RIBOSOMAL PROTEIN S23.	IPI00478310 IPI00218606		2		3	: :
	Ribosomal protein Ribosomal protein	ARL6IP EIF2A	IPI00014232 IPI00012462	5	1			- :
Nucleic acid binding	Ribosomal protein	ETF1	IPI00429191	2				
	Ribosomal protein Ribosomal protein	GADD45A GADD45B	IPI00029104 IPI00307805				5	
Nucleic acid binding	Ribosomal protein	ITGB4BP	IPI00010105				2	
	Ribosomal protein Ribosomal protein	LOC388519 LOC391701	IPI00450975 IPI00376564		/	3	14	1
	Ribosomal protein Ribosomal protein	LOC401016 LOC401676	IPI00419880 IPI00457031	4			1	
Nucleic acid binding	Ribosomal protein	LOC441112	IPI00008527				'	
	Ribosomal protein Ribosomal protein	LOC441912 MRPL12	IPI00218606 IPI00005537				4	1
Nucleic acid binding	Ribosomal protein	MRPL14	IPI00418290					
	Ribosomal protein Ribosomal protein	MRPL32 MRPL49	IPI00011077 IPI00555553	2			1	
Nucleic acid binding	Ribosomal protein	MRPS7 MRPS11	IPI00006440 IPI00010244	1				
Nucleic acid binding	Ribosomal protein Ribosomal protein	MRPS17	IPI00465185				1	
	Ribosomal protein Ribosomal protein	MRPS21 NAG	IPI00014812 IPI00333913	1		1	12	
Nucleic acid binding	Ribosomal protein	PREDICTED: SIMILAR TO RIBOSOMAL PROTEIN L7.	IPI00018680				1	
	Ribosomal protein Ribosomal protein	RPL4 RPL11	IPI00003918 IPI00376798		4		3	
Nucleic acid binding	Ribosomal protein	RPL12	IPI00456966		6		12	
	Ribosomal protein Ribosomal protein	RPL18 RPL22	IPI00215719 IPI00219153	4	3		3	
	Ribosomal protein Ribosomal protein	RPL30	IPI00010153 IPI00219156	11	12	9	12	23
Nucleic acid binding	Ribosomal protein	RPL38	IPI00215790	4	3		6	
	Ribosomal protein Ribosomal protein	RPLP0 RPLP2	IPI00008530 IPI00008529	2	2		5	
Nucleic acid binding	Ribosomal protein	RPS3	IPI00455589	15			11	
	Ribosomal protein Ribosomal protein	RPS4X RPS5	IPI00217030 IPI00008433	14	13	13		
Nucleic acid binding	Ribosomal protein	RPS8 RPS9	IPI00216587 IPI00221088				5	
Nucleic acid binding	Ribosomal protein Ribosomal protein	RPS10	IPI00454704		3		2	
	Ribosomal protein Ribosomal protein	RPS11 RPS12	IPI00025091 IPI00013917	3		6	3	-
Nucleic acid binding	Ribosomal protein	RPS12	IPI00414922	_ ď	4			
	Ribosomal protein Ribosomal protein	RPS13 RPS14	IPI00221089 IPI00026271	3	8	3	5 12	
Nucleic acid binding	Ribosomal protein	RPS15A	IPI00221091	3	2	6	3	
Nucleic acid binding	Ribosomal protein Ribosomal protein	RPS17 RPS18	IPI00414603 IPI00013296		3			į į
Nucleic acid binding	Ribosomal protein Ribosomal protein	RPS19 RPS20	IPI00215780 IPI00012493	6	6	2	11	
Nucleic acid binding	Ribosomal protein	RPS21	IPI00387084	<u>'</u>	Ĺ			
	Ribosomal protein Ribosomal protein	RPS25 RPS26P10	IPI00012750 IPI00176696	3		3	8 8	
Nucleic acid binding	Ribosomal protein	RPS27	IPI00221096	4				
	Ribosomal protein Ribosomal protein	RPS27 RPS27A	IPI00422085 IPI00387164	46	5 14	62	21	72
Nucleic acid binding	Ribosomal protein	RPS28 RPSA	IPI00556589		_		4	,
Nucleic acid binding	Ribosomal protein Ribosomal protein	SIMILAR TO 40S RIBOSOMAL PROTEIN S12.	IPI00553164 IPI00414922	3	2		4	
Nucleic acid binding	Ribosomal protein	SIMILAR TO 60S ACIDIC RIBOSOMAL PROTEIN P1 (H. SA SIMILAR TO DJ753D5.2 (NOVEL PROTEIN SIMILAR TO RP	IPI00059481 IPI00414447				1	
	Ribosomal protein Ribosomal protein	SIMILAR TO RIBOSOMAL PROTEIN L9.	IPI00140907				1	
	Ribosomal protein	SIMILAR TO RIBOSOMAL PROTEIN L31. SIMILAR TO RIBOSOMAL PROTEIN S10 (H. SAPIENS).	IPI00181443 IPI00037555				1	
Nucleic acid binding	Ribosomal protein							
Nucleic acid binding Nucleic acid binding Nucleic acid binding	Ribosomal protein Ribosomal protein	SIMILAR TO RIBOSOMAL PROTEIN S27.	IPI00451483			6	8	
Nucleic acid binding Nucleic acid binding Nucleic acid binding Nucleic acid binding						6	8	

Drotoin family	Cubfomily	Protein name	IPI acc. no.	Numb	equence matches			
Protein family	Subfamily	(Sugen nomenclature for kinases when available, rest from IPI)	IPI acc. no.	HeLa	Placenta	Jurkat	K562	Ramos
	Transcription factor	AFF4	IPI00004344	106		4	50	45
	Transcription factor Transcription factor	AIP BATF	IPI00010460 IPI00007422	3		5		12 1
	Transcription factor Transcription factor	CARM1 CBFA2T3	IPI00639957 IPI00306845				4	5
Nucleic acid binding	Transcription factor	CBL	IPI00027269				1	
	Transcription factor Transcription factor	COPS5 EDF1	IPI00009958 IPI00021570	2	1		8	6
Nucleic acid binding	Transcription factor	ELL	IPI00023467				4	4
	Transcription factor Transcription factor	FMNL2 FUBP1	IPI00464953 IPI00163782	7	2	2	2	
Nucleic acid binding	Transcription factor	G10	IPI00013180					4
	Transcription factor Transcription factor	GTF2F1 GTF2H1	IPI00017450 IPI00030380	4		3		3
	Transcription factor Transcription factor	GTF2H2 GTF2H3	IPI00377097 IPI00100791	3			8	5
Nucleic acid binding	Transcription factor	GTF2H4	IPI00016839				5	
	Transcription factor Transcription factor	GTF2I GTF3C3	IPI00054042 IPI00015806				1	11
Nucleic acid binding	Transcription factor	HCFC1	IPI00019848			. 1	·	
	Transcription factor Transcription factor	HCLS1 HDAC1	IPI00026156 IPI00013774	2		137		10
	Transcription factor	HDAC2	IPI00289601	5		13	15	1 22
	Transcription factor Transcription factor	HDAC6 HDAC10	IPI00005711 IPI00012439	19	3	15	11	9
	Transcription factor Transcription factor	HIGH MOBILITY GROUP PROTEIN HMG-I/HMG-Y. HMGA1	IPI00177716 IPI00179700		6		3	2
Nucleic acid binding	Transcription factor	HMGB2	IPI00219097		·	12	4	12
	Transcription factor Transcription factor	HNRPD HSD17B8	IPI00028888 IPI00641330		22	1		6
Nucleic acid binding	Transcription factor	HSPC016	IPI00006378		2		4	4
	Transcription factor Transcription factor	Huntingtin ID1	IPI00002335 IPI00012718			4	12	51 2
Nucleic acid binding	Transcription factor	IFI16	IPI00003443 IPI00418313	1		4		5
Nucleic acid binding	Transcription factor Transcription factor	ILF3 IRF4	IPI00289982		2			7
	Transcription factor Transcription factor	IRF8 KHDRBS1	IPI00026224 IPI00008575	5				1
Nucleic acid binding	Transcription factor	KNTC1	IPI00001458	10		4	3	12
	Transcription factor Transcription factor	Kua LASS2	IPI00397947 IPI00305304		1	6	6	13
Nucleic acid binding	Transcription factor	LASS2	IPI00472101	11	_			
	Transcription factor Transcription factor	LOC440719 MAFK	IPI00455474 IPI00031018					3
	Transcription factor	MED31	IPI00007021			1		0
	Transcription factor Transcription factor	MED31 MLLT1	IPI00023537 IPI00100630	23		10	27	23
	Transcription factor Transcription factor	MMS19L MSRB2	IPI00154451 IPI00032871	15	6	3	4 8	1
Nucleic acid binding	Transcription factor	NFKB2	IPI00024116	4		2	·	
	Transcription factor Transcription factor	NPM1 PA2G4	IPI00014923 IPI00299000			3	5	
Nucleic acid binding	Transcription factor	PAF1	IPI00300333			1	3	4
	Transcription factor Transcription factor	PBXIP1 PCDH1	IPI00332106 IPI00176458		1 4			
	Transcription factor Transcription factor	PFDN1 PFDN5	IPI00000051 IPI00015361		2	2	2	4
	Transcription factor	PHB	IPI00015361	51	46	41	26	65
	Transcription factor Transcription factor	PHF5A PHOX2A	IPI00005511 IPI00024171	4		2	4	6
Nucleic acid binding	Transcription factor	PIR	IPI00012575	1				
	Transcription factor Transcription factor	POU2AF1 PPARGC1B	IPI00293727 IPI00152517			1		7
Nucleic acid binding	Transcription factor	PSMC3	IPI00018398	3		1	3	
	Transcription factor Transcription factor	PURA RB1	IPI00023591 IPI00302829		3	9		
	Transcription factor Transcription factor	RBM14 RNF20	IPI00013174 IPI00251559			2		2
Nucleic acid binding	Transcription factor	RPAP1	IPI00402657	10		3		6
	Transcription factor Transcription factor	RTF1 RUNX1	IPI00303832 IPI00218943	1		3	3	2
	Transcription factor	SAP18	IPI00011698				4	
	Transcription factor Transcription factor	SFRS2 SMAD1	IPI00005978 IPI00019549	1		3	5	
	Transcription factor	SMARCC1	IPI00234252				7	1
Nucleic acid binding	Transcription factor Transcription factor	SMARCC2 SND1	IPI00216047 IPI00140420	1	1		3	1
	Transcription factor Transcription factor	STAT3 STAT5A	IPI00298887 IPI00030783	8	13	5	6 13	
Nucleic acid binding	Transcription factor	SUB1	IPI00221222	32	9		51	6
	Transcription factor Transcription factor	SUPT4H1 SUPT5H	IPI00442913 IPI00298058	7	-	2	2	3
Nucleic acid binding	Transcription factor	SUPT6H SUPT16H	IPI00456681	2				
	Transcription factor Transcription factor	TARDBP	IPI00026970 IPI00025815	28			4	5
Nucleic acid binding	Transcription factor Transcription factor	TBR1 TFAM	IPI00003421 IPI00020928	7		3		
Nucleic acid binding	Transcription factor	TFCP2	IPI00037599					6
	Transcription factor Transcription factor	TIAL1 TREP	IPI00005615 IPI00174852	12	1	 	8	17
Nucleic acid binding	Transcription factor	TRIM22	IPI00477812					6
	Transcription factor Transcription factor	TRIM25 TRIP11	IPI00029629 IPI00003515	11	13	4	6	1
Nucleic acid binding	Transcription factor	TRIP13	IPI00003505	4		_	5	4
	Transcription factor Transcription factor	UBTF VARSL	IPI00014533 IPI00640597	4		6	1	2
Nucleic acid binding	Transcription factor	WDR39	IPI00008791	7	1	er.	1 23	6 81
	Transcription factor Transcription factor	YEATS4 ZNF207	IPI00008536 IPI00013457	36		65	3	81
Nucleic acid binding	Transcription factor	ZNF265 ZNF277	IPI00029400 IPI00479533	8	2	8	8	15
Nucleic acid binding	Transcription factor Translation factor	BZW1	IPI00556167	5			6	7
	Translation factor Translation factor	BZW2 DENR	IPI00022305 IPI00306280	2			3	7
Nucleic acid binding	Translation factor	EEF1A1	IPI00472724	3	34		3	30
	Translation factor Translation factor	EEF1A2 EEF1B2	IPI00014424 IPI00178440	60	78		102	35 1
		EEF1D	IPI00178440	6	6		4	7
	Translation factor Translation factor	EEF1G	IPI00000875	3	5		20	

Protein family	Subfamily	Protein name	IPI acc. no.	Numb	or of spec	trum-to-se	allonco m	atches
Fioteninanniy	Sublannily	(Sugen nomenclature for kinases when available, rest from IPI)	IFT acc. 110.	HeLa	Placenta	Jurkat	K562	Ramos
	Translation factor	EIF1	IPI00015077	5				2
Nucleic acid binding Nucleic acid binding	Translation factor Translation factor	EIF1AY EIF2S1	IPI00719092 IPI00219678	3	2	8	1	1
Nucleic acid binding Nucleic acid binding	Translation factor Translation factor	EIF2S3 EIF3S1	IPI00419827 IPI00290461	17 85	1 57	127	129	146
Nucleic acid binding	Translation factor	EIF3S2	IPI00012795	10		4	10	10
	Translation factor Translation factor	EIF3S3 EIF3S4	IPI00647650 IPI00290460	7	2	4	1	7
Nucleic acid binding	Translation factor	EIF3S5	IPI00240909	4				3
Nucleic acid binding Nucleic acid binding	Translation factor Translation factor	EIF3S5 EIF3S6	IPI00654777 IPI00013068	4		2	4	11
Nucleic acid binding Nucleic acid binding	Translation factor Translation factor	EIF3S7 EIF3S8	IPI00006181 IPI00016910	7		5 9	13	12
Nucleic acid binding	Translation factor	EIF3S9	IPI00719752	17	1	8		12
Nucleic acid binding Nucleic acid binding	Translation factor Translation factor	EIF3S10 EIF3S12	IPI00029012 IPI00033143	48		14	6	47 7
Nucleic acid binding Nucleic acid binding	Translation factor Translation factor	EIF4B EIF4E	IPI00012079 IPI00027485	9	2	2	4	5
Nucleic acid binding	Translation factor	EIF4G1	IPI00479262	13			4	6
Nucleic acid binding Nucleic acid binding	Translation factor Translation factor	EIF5 EIF5A2	IPI00022648 IPI00376005	2	8		20	6
Nucleic acid binding Nucleic acid binding	Translation factor Translation factor	EIF5B EUKARYOTIC TRANSLATION ELONGATION FACTOR 1 ALPHA	IPI00299254 IPI00513808	28		5 8	5	4
Nucleic acid binding	Translation factor	GCN1L1	IPI00001159	315	58	89	295	475
Nucleic acid binding Nucleic acid binding	Translation factor Translation factor	GSPT1 KIAA0664	IPI00218829 IPI00024425	38		10		9
Nucleic acid binding	Translation factor	LOC143244	IPI00218084			5		Ŭ
Nucleic acid binding Nucleic acid binding	Translation factor Translation factor	PABPC1 TCEA1	IPI00008524 IPI00333215		6		3	2
	Translation factor	TCEA2	IPI00472949	8		2	16	2
Nucleic acid binding		TUFM WBSCR1	IPI00027107 IPI00014263	6	4	1	2	4
	Translation factor Other	WDR44 AFF3	IPI00444371 IPI00515069	5	13	9	5	31
Nucleic acid binding	Other	ARL5A	IPI00412787		3			Ţ
	Other Other	ARL10 ARL15	IPI00446829 IPI00005163				2	11
Nucleic acid binding	Other Other	C14orf156 C16orf34	IPI00009922 IPI00072955	5			6	
Nucleic acid binding	Other	CD19	IPI00072955 IPI00305031					3
	Other Other	CHERP CIRBP	IPI00333010 IPI00180954		11	2	1	3
Nucleic acid binding	Other	CPSF2	IPI00419531	5			3	3
	Other Other	CPSF3 CSPG4	IPI00007818 IPI00019157	2	7			6
	Other Other	CSTF2 DDB1	IPI00013256 IPI00293464	2 12	7	15	15	35
Nucleic acid binding	Other	DENND4A	IPI00396063	12		15	15	1
	Other Other	DYNC1LI1 DYNC1LI2	IPI00007675 IPI00011592	1	1			5
Nucleic acid binding	Other	ERAL1	IPI00026512		·		1	2
	Other Other	FANCG FRG1	IPI00005769 IPI00004655	2		7	1	3
	Other Other	GIMAP1 H1F0	IPI00103387 IPI00550239		3	3		
Nucleic acid binding	Other	H2AFV	IPI00654702		0			1
	Other Other	H2AFZ HIST1H1B	IPI00644478 IPI00217468		8			4
Nucleic acid binding	Other	HIST1H1C	IPI00217465	2	26			
	Other Other	HIST1H1E HIST1H2BN	IPI00217466 IPI00719084	3	11 8			4
	Other Other	HIST3H2BB HIST4H4	IPI00619923 IPI00453473	6	4	7	2	4
Nucleic acid binding	Other	HMGB3	IPI00217477	3	30		J	,
	Other Other	HMGN2 HNRPA0	IPI00478470 IPI00011913		2			1
Nucleic acid binding Nucleic acid binding	Other Other	HNRPH2 HNRPL	IPI00026230 IPI00027834	1	2	4	1	2
Nucleic acid binding	Other	HNRPM	IPI00027834	20	3	2	12	19
	Other Other	HNRPR HNRPU	IPI00644055 IPI00025054	2 31	22	2 11	22	9
Nucleic acid binding	Other	HNRPUL1	IPI00013070	-		3	3	10
Nucleic acid binding Nucleic acid binding	Other Other	HSPA12B HYOU1	IPI00307820 IPI00000877		3			
Nucleic acid binding		HYPOTHETICAL PROTEIN XP_016170. IFITM3	IPI00180730 IPI00303726	9	1		5	
Nucleic acid binding	Other	IPI00003262.1	IPI00003262	2	·		-	
		KHSRP KLHDC3	IPI00479786 IPI00062558	5 4	3	31	38	34
Nucleic acid binding	Other	LANCL2	IPI00032995 IPI00185919	2		2	2	3
Nucleic acid binding	Other Other	LARP1 LIME1	IPI00553175			6		3
	Other Other	LRPPRC LRRFIP1	IPI00329745 IPI00656067	15			13	13
Nucleic acid binding	Other	MCM3AP	IPI00028954					2
	Other Other	MCTS1 NACA	IPI00645446 IPI00023748	6	1	2	2	2
Nucleic acid binding	Other Other	NCK2 NCL	IPI00306531 IPI00604620	8	8		27 9	35
Nucleic acid binding	Other	NHP2L1	IPI00026167	3	3	2	1	3
	Other Other	NOLA2 NOLC1	IPI00041325 IPI00216654	30		14	23	32
Nucleic acid binding	Other	NOM1	IPI00145593			2		5
Nucleic acid binding	Other Other	NPM3 NUBP2	IPI00026496 IPI00644674	3	2	3	5	4
	Other Other	PBP PDCD5	IPI00454722 IPI00023640	3	6		7	4
Nucleic acid binding	Other	PDLIM5	IPI00007935	,	6		-	
	Other Other	PLCG1 POLDIP3	IPI00016736 IPI00440688	3		16	-	4
Nucleic acid binding	Other	POM121	IPI00032358	-				1
	Other Other	PPP4C PRPF39	IPI00012833 IPI00383823	11 4	4	11	10	21 8
Nucleic acid binding	Other Other	PSPC1 PTRF	IPI00103525 IPI00176903				2	2
Nucleic acid binding	Other	PUM1	IPI00032355				2	1
	Other Other	RAB2 RAB8A	IPI00031169 IPI00028481		4	-	1	2
Nucleic acid binding	Other	RAB17	IPI00007866	28	8			<u>'</u>
Nucleic acid binding	Other	RAB21	IPI00007755	1	8	3	2	4

Protein family	Subfamily	Protein name	IPI acc. no.	Numb	er of spec	trum-to-se	duence m	atches
1 Totoli Tiditiliy	Cubianiny	(Sugen nomenclature for kinases when available, rest from IPI)	11 1 400. 110.	HeLa	Placenta	Jurkat	K562	Ramos
Nucleic acid binding	Other	RAD23B	IPI00008223		12			
Nucleic acid binding Nucleic acid binding	Other Other	RAP2B RAVER1	IPI00018364 IPI00217661		3			:
Nucleic acid binding	Other	RBM3	IPI00024320	4	7	1		
Nucleic acid binding Nucleic acid binding	Other Other	RBM17 RBM25	IPI00176706 IPI00004273			11	2 6	
Nucleic acid binding	Other	RCC2	IPI00465044	7	2	17	10	15
Nucleic acid binding Nucleic acid binding	Other Other	RNPC2 SAR1B	IPI00163505 IPI00002149	8	1	5	5	1
Nucleic acid binding	Other	SF3A1	IPI00017451	1	·	·	5	
Nucleic acid binding Nucleic acid binding	Other Other	SF3B1 SF3B2	IPI00026089 IPI00221106	10		9	9	23
Nucleic acid binding	Other	SF3B14	IPI00032827	3		5		1
Nucleic acid binding Nucleic acid binding	Other Other	SFRS6 SHANK2	IPI00012345 IPI00220490	17				
Nucleic acid binding	Other	SIMILAR TO CGI-55 PROTEIN.	IPI00185197	17	3	2	4	4
Nucleic acid binding Nucleic acid binding	Other Other	SNRPF SRP14	IPI00220528 IPI00293434	3		9	3	11
Nucleic acid binding	Other	SRP19	IPI00295889	3	3	2	2	12
Nucleic acid binding	Other	SRP68 SRRM1	IPI00168388	5		19	6	2
Nucleic acid binding Nucleic acid binding	Other Other	SRRM2	IPI00328293 IPI00099730	9		21	32 34	73
Nucleic acid binding	Other	SSB	IPI00009032	1			5	
Nucleic acid binding Nucleic acid binding	Other Other	SSBP1 SYNCRIP	IPI00029744 IPI00018140	3		3	6	10
Nucleic acid binding	Other	THOC2	IPI00158615			2		
Nucleic acid binding Nucleic acid binding	Other Other	TIA1 TSN	IPI00291398 IPI00018768	1	1	7	8	10
Nucleic acid binding	Other	TTC14	IPI00550503	10		8	11	
Nucleic acid binding	Other	XPOT ZNF9	IPI00306290	19	11	23	28	30
Nucleic acid binding Nucleic acid binding	Other Other	ZNF291	IPI00430812 IPI00307114	3	<u> </u>	4	1	
Nucleic acid binding	Other	ZNF706	IPI00183657	2		1	2	- 2
Nucleic acid binding Protein binding	Other Cytoskeleton	ZWILCH 14-3-3 zeta human	IPI00329679 IPI00021263	88	4	53	111	26
Protein binding	Cytoskeleton	ANK3	IPI00472779			- 50		
Protein binding Protein binding	Cytoskeleton Cytoskeleton	AP3M1 AP3S1	IPI00032459 IPI00014624	1			2	-
Protein binding	Cytoskeleton	ARCN1	IPI00298520	5	4	2	_	į
Protein binding Protein binding	Cytoskeleton Cytoskeleton	ARPC1B ARPC5	IPI00005160 IPI00645266		1			
Protein binding	Cytoskeleton	ARPC5L	IPI00304459		1		1	-
Protein binding Protein binding	Cytoskeleton Cytoskeleton	BASP1 CEP192	IPI00299024 IPI00456708	5		1	1	17
Protein binding	Cytoskeleton	CKAP4	IPI00430708		32		'	3
Protein binding	Cytoskeleton	CLTA CLTB	IPI00014587 IPI00014589	2	2	1	2	
Protein binding Protein binding	Cytoskeleton Cytoskeleton	COPZ1	IPI00032851				3	
Protein binding	Cytoskeleton	CSRP1	IPI00442073	8				
Protein binding Protein binding	Cytoskeleton Cytoskeleton	CSRP2 CYFIP1	IPI00002824 IPI00644231	40	27 18		89	
Protein binding	Cytoskeleton	CYFIP2	IPI00655548			8		29
Protein binding Protein binding	Cytoskeleton Cytoskeleton	EML2 EML3	IPI00015944 IPI00167909	29 10				
Protein binding	Cytoskeleton	EML4	IPI00001466	7	48			
Protein binding Protein binding	Cytoskeleton	FLG HSPG2	IPI00026256 IPI00024284	3	1	2	13	9
Protein binding	Cytoskeleton Cytoskeleton	IPI00037367.2	IPI00024264		3		13	
Protein binding	Cytoskeleton	IPI00105140.1	IPI00105140		1			
Protein binding Protein binding	Cytoskeleton Cytoskeleton	IPI00332047.2 ITGA1	IPI00332047 IPI00106698				4	2
Protein binding	Cytoskeleton	LMNB1	IPI00217975		3			15
Protein binding Protein binding	Cytoskeleton Cytoskeleton	LMNB2 LOC387805	IPI00009771 IPI00005162		3	4	4	1
Protein binding	Cytoskeleton	MAP4	IPI00396171		7			
Protein binding Protein binding	Cytoskeleton Cytoskeleton	MAP4 MAP7	IPI00411375 IPI00022628	7	3		1	
Protein binding	Cytoskeleton	NCKAP1L	IPI00604736			10	5	4
Protein binding Protein binding	Cytoskeleton Cytoskeleton	NPM1 PAXILLIN VARIANT (FRAGMENT).	IPI00549248 IPI00555917	7				1
Protein binding	Cytoskeleton	PFN1	IPI00333917	16	13	22	19	13
Protein binding	Cytoskeleton	PFN2	IPI00107555	11	2	8		- 6
Protein binding Protein binding	Cytoskeleton Cytoskeleton	PSTPIP2 SIMILAR TO 40S RIBOSOMAL PROTEIN S11.	IPI00170554 IPI00078131				9	- 2
Protein binding	Cytoskeleton	TAGLN2	IPI00647915		55		15	11
Protein binding Protein binding	Cytoskeleton Cytoskeleton	TBCD TLN1	IPI00030774 IPI00298994	3 12	155	11	3 42	11
Protein binding	Cytoskeleton	TUBA1	IPI00007750	5				3
Protein binding Protein binding	Cytoskeleton Cytoskeleton	TUBA6 TUBAL3	IPI00387144 IPI00015671	156	179	221	174	215
Protein binding	Cytoskeleton	TUBB	IPI00011654	206			217	152
Protein binding Protein binding	Cytoskeleton Cytoskeleton	TUBB2A TUBB3	IPI00013475 IPI00152453	12	5	5 5	4	
Protein binding Protein binding	Cytoskeleton	TUBB4	IPI00655896	28	111	24	32	30
Protein binding	Cytoskeleton	TUBB6	IPI00034283	4	. 4		6	
Protein binding Protein binding	Cytoskeleton Cytoskeleton	TUBGCP2 TUBGCP3	IPI00029705 IPI00033516	5		5		
Protein binding	Cytoskeleton	TUBGCP5	IPI00045492			1		
Protein binding Protein binding	Enzyme inhibitor Enzyme inhibitor	A2M AGT	IPI00478003 IPI00032220	1	156			-
Protein binding	Enzyme inhibitor	AHRR	IPI00025277	2	14	18	24	15
Protein binding Protein binding	Enzyme inhibitor Enzyme inhibitor	AMBP ANGPTL3	IPI00022426 IPI00004957	-	4	-		ļ .
Protein binding	Enzyme inhibitor	ANP32E	IPI00165393	6		6		
Protein binding	Enzyme inhibitor	ANXA1 ANXA2	IPI00218918	19	278		2	
Protein binding Protein binding	Enzyme inhibitor Enzyme inhibitor	ANXA3	IPI00418169 IPI00024095	19	12		11	
Protein binding	Enzyme inhibitor	ANXA5	IPI00329801.		18			
Protein binding Protein binding	Enzyme inhibitor Enzyme inhibitor	Axin1 BIRC5	IPI00204189 IPI00218095	1	1	5	1	
Protein binding	Enzyme inhibitor	BIRC6	IPI00299635	9			12	20
Protein binding Protein binding	Enzyme inhibitor Enzyme inhibitor	C3 C4A	IPI00164623 IPI00719024		33 16			
Protein binding Protein binding	Enzyme inhibitor	C5	IPI00719024 IPI00032291		16			
	Enzyme inhibitor	CNOT1	IPI00166010	1		27	10	10
Protein binding		COL6A3	IPI00022200	ı	7	1	1	l
Protein binding Protein binding Protein binding	Enzyme inhibitor Enzyme inhibitor	CST3	IPI00032293		2			
Protein binding			IPI00032293 IPI00032325 IPI00021828	4		1 9	5	

Drotoin family	Cubfomily	Dratain name	IPI acc. no.	Numb	or of anno	pectrum-to-sequence matche		
Protein family	Subfamily	Protein name (Sugen nomenclature for kinases when available, rest from IPI)	IPI acc. no.	HeLa	Placenta	Jurkat	K562	Ramos
Protein binding	Enzyme inhibitor	HSPA5	IPI00003362	132	102	68	71	109
Protein binding Protein binding	Enzyme inhibitor Enzyme inhibitor	IGBP1 ITIH1	IPI00019148 IPI00292530		2			1
Protein binding Protein binding	Enzyme inhibitor Enzyme inhibitor	ITIH4 KNG1	IPI00294193 IPI00032328		18			
Protein binding	Enzyme inhibitor	NF1	IPI00299512	13	4	12	27	21
Protein binding Protein binding	Enzyme inhibitor Enzyme inhibitor	PPP2R1A PPP2R2A	IPI00419307 IPI00332511	21	13	19	21	77 10
Protein binding	Enzyme inhibitor	PPP4R2	IPI00103654	16	8	30		25
Protein binding Protein binding	Enzyme inhibitor Enzyme inhibitor	PROTEIN PHOSPHATASE 4 REGULATORY SUBUNIT 2. RNH1	IPI00067514 IPI00550069				1	3
Protein binding	Enzyme inhibitor	SEL1L	IPI00002790	17	6			2
Protein binding Protein binding	Enzyme inhibitor Enzyme inhibitor	SET SET	IPI00072377 IPI00301311	17	2	4	4	2
Protein binding Protein binding	Enzyme inhibitor Enzyme inhibitor	STS-1 TFPI2	IPI00154910 IPI00009198		18	62	186	40
Protein binding	Enzyme inhibitor	TIMP2	IPI00027166		3			
Protein binding Protein binding	Enzyme inhibitor Enzyme inhibitor	TIMP3 TRAF1	IPI00218247 IPI00011549	2	3			26
Protein binding	GTPase regulator	ABR	IPI00030389					2
Protein binding Protein binding	GTPase regulator GTPase regulator	ARFGEF1 ARFGEF2	IPI00002188 IPI00002186	42		12		10 26
Protein binding	GTPase regulator	ARHGDIA	IPI00003815		3	1		
Protein binding Protein binding	GTPase regulator GTPase regulator	ARHGDIB ARHGEF2	IPI00003817 IPI00643259		1	3	1	3
Protein binding Protein binding	GTPase regulator GTPase regulator	ARHGEF18 ARL2	IPI00179437 IPI00003326		2	1	1	
Protein binding Protein binding	GTPase regulator GTPase regulator	CENTD1	IPI00003326	41		13	2	7
Protein binding Protein binding	GTPase regulator GTPase regulator	CENTD2 CENTD3	IPI00646915 IPI00103380				6 48	
Protein binding	GTPase regulator	CTAGE6	IPI00470926	2			48	
Protein binding Protein binding	GTPase regulator GTPase regulator	DNMBP DOCK2	IPI00174025 IPI00022449	-	-	56	13	1 30
Protein binding	GTPase regulator	DOCK8	IPI00552545			- 55		20
Protein binding Protein binding	GTPase regulator GTPase regulator	EIF2B1 EIF2B4	IPI00221300 IPI00220232	1	-		1	1
Protein binding	GTPase regulator	EIF2B5	IPI00011898					3
Protein binding Protein binding	GTPase regulator GTPase regulator	EPS8L1 EVI5L	IPI00301250 IPI00060473		1		3	4
Protein binding	GTPase regulator	FARP1	IPI00450955		3			
Protein binding Protein binding	GTPase regulator GTPase regulator	FGD3 GAPVD1	IPI00384357 IPI00292753	149	24		187	234
Protein binding Protein binding	GTPase regulator GTPase regulator	GBF1 GBL	IPI00021954 IPI00549974	9	7	3		18
Protein binding	GTPase regulator	GDI2	IPI00031461		,		5	
Protein binding Protein binding	GTPase regulator GTPase regulator	GNB1 GNB1L	IPI00026268 IPI00107339		3		12	2
Protein binding	GTPase regulator	GNB2	IPI00003348		6	3		Ŭ
Protein binding Protein binding	GTPase regulator GTPase regulator	GNB4 HERC2	IPI00012451 IPI00005826				13	- 4
Protein binding	GTPase regulator	IQGAP1	IPI00009342	59	71		9	20
Protein binding Protein binding	GTPase regulator GTPase regulator	IQGAP2 KIAA1244	IPI00299048 IPI00179164	4	55	3	7	
Protein binding	GTPase regulator	LOC389842	IPI00399212	2		4	10	5
Protein binding Protein binding	GTPase regulator GTPase regulator	PTPLAD1 RAB3-GAP150	IPI00008998 IPI00554590	14 4	18	4	/	14
Protein binding Protein binding	GTPase regulator GTPase regulator	RANBP2 RANBP5	IPI00221325 IPI00329200	9	7	36	24	32 65
Protein binding	GTPase regulator	RANBP6	IPI00514622	31	· ·	30	24	4
Protein binding Protein binding	GTPase regulator GTPase regulator	RANBP10 RANGAP1	IPI00039864 IPI00411570	1				5
Protein binding	GTPase regulator	RAP1GDS1	IPI00607591			1		
Protein binding Protein binding	GTPase regulator GTPase regulator	RASA1 RCC1	IPI00026262 IPI00001661		19		4	
Protein binding	GTPase regulator	RGS13	IPI00024710	47				6
Protein binding Protein binding	GTPase regulator GTPase regulator	RIN1 TBC1D1	IPI00014454 IPI00164610	47				1
Protein binding Protein binding	GTPase regulator GTPase regulator	TBC1D4 TBC1D15	IPI00220901 IPI00154645	3		2		43
Protein binding	GTPase regulator	TSC2	IPI00134643			17		8
Protein binding Protein binding	GTPase regulator GTPase regulator	VAV1 VAV3	IPI00011696 IPI00299763			32 6	5	3
Protein binding	GTPase regulator	WAS	IPI00001545			Ů		5
Protein binding Protein binding	Kinase regulatory subunit Kinase regulatory subunit	AHSG AZI2	IPI00022431 IPI00008255	108	7 68	153	135	129
Protein binding	Kinase regulatory subunit	CABLES1	IPI00291427	22	30			32
Protein binding Protein binding	Kinase regulatory subunit Kinase regulatory subunit	CABLES2 CABLES2	IPI00030512 IPI00552732	<u> </u>	<u> </u>	27		1
Protein binding	Kinase regulatory subunit	CCNH	IPI00021305	63 12	10		100	92 53
Protein binding Protein binding	Kinase regulatory subunit Kinase regulatory subunit	CCNI CDC16	IPI00028541 IPI00022091	12 24		21 30	26 13	15
Protein binding Protein binding	Kinase regulatory subunit Kinase regulatory subunit	CDC26 CDC27	IPI00169387 IPI00294575	35		6	6	15
Protein binding	Kinase regulatory subunit	CDK5R1	IPI00014316			14	9	13
Protein binding Protein binding	Kinase regulatory subunit Kinase regulatory subunit	CDKN2A CKS1B	IPI00001560 IPI00015104	9			2	
Protein binding	Kinase regulatory subunit	CSNK2B	IPI00010865	40	62	136	101	132
Protein binding Protein binding	Kinase regulatory subunit Kinase regulatory subunit	GMFG IKBKAP	IPI00028414 IPI00293735	25		20		2 11
Protein binding	Kinase regulatory subunit	MADD	IPI00103536					2
Protein binding Protein binding	Kinase regulatory subunit Kinase regulatory subunit	MAP2K1IP1 PAG1	IPI00030919 IPI00020464			120		9 278
Protein binding Protein binding	Kinase regulatory subunit Kinase regulatory subunit	PIK3R1 PIK3R2	IPI00021448 IPI00011736		6		14 19	3
Protein binding	Kinase regulatory subunit	PRKAB2	IPI00013905	123	78		33	59
Protein binding Protein binding	Kinase regulatory subunit Kinase regulatory subunit	PRKAG2 PRKAR1A	IPI00005367 IPI00021831	28	99	12	17	36
Protein binding	Kinase regulatory subunit	Rictor	IPI00455500	14				2
Protein binding Protein binding	Kinase regulatory subunit Kinase regulatory subunit	SFN TBKBP1	IPI00013890 IPI00006064	19 190	11	53	158	3 63
Protein binding	Kinase regulatory subunit	YWHAG	IPI00220642	86	25	37	82	63
Protein binding Protein binding	Kinase regulatory subunit Receptor binding	YWHAH ACTN1	IPI00216319 IPI00013508	26	19 7	22	38	42
Protein binding	Receptor binding	ACTN4	IPI00013808		32		30	
Protein binding Protein binding	Receptor binding Receptor binding	AKAP9 ARTS-1	IPI00220628 IPI00165949		5	3	4	11
Protein binding	Receptor binding	AZGP1	IPI00166729	2	1	3		1
Protein binding Protein binding	Receptor binding Receptor binding	BCAP31 BID	IPI00218200 IPI00420084		5	3	1	
Protein binding	Receptor binding	BID	IPI00472003				·	2

Protein family	Subfamily	Protein name	IPI acc. no.	Numb	er of spec	trum-to-se	quence m	atches
	,	(Sugen nomenclature for kinases when available, rest from IPI)		HeLa	Placenta	Jurkat	K562	Ramos
Protein binding Protein binding	Receptor binding Receptor binding	BST2 C20orf14	IPI00026241 IPI00305068	2	3	3	1	7
Protein binding	Receptor binding	CCNE1 CD74	IPI00031077	11			7	11
Protein binding Protein binding	Receptor binding Receptor binding	CMTM6	IPI00022933 IPI00015801			1		3
Protein binding Protein binding	Receptor binding Receptor binding	CSH2 CTNNB1	IPI00025785 IPI00017292		86 10			
Protein binding	Receptor binding	DIAPH1	IPI00030876	10			- 40	
Protein binding Protein binding	Receptor binding Receptor binding	DOK1 DOK2	IPI00015287 IPI00022602		2	2	12 34	
Protein binding Protein binding	Receptor binding Receptor binding	EBI3 ENSA	IPI00034088 IPI00410177	1	3			
Protein binding	Receptor binding	FAM3C	IPI00334282	·	2			
Protein binding Protein binding	Receptor binding Receptor binding	FGF2 FHL2	IPI00154603 IPI00396967		3		17	
Protein binding	Receptor binding	FYB GABARAPL2	IPI00073110 IPI00026358			93		
Protein binding Protein binding	Receptor binding Receptor binding	GH1	IPI00000890		2			- 4
Protein binding Protein binding	Receptor binding Receptor binding	GLG1 GNB2L1	IPI00414717 IPI00641950	7	2	8	2	2
Protein binding	Receptor binding	GPI	IPI00027497	2		-	2	
Protein binding Protein binding	Receptor binding Receptor binding	GRB2 HDGF	IPI00021327 IPI00514127	4	6	6	152	/
Protein binding Protein binding	Receptor binding Receptor binding	HYPOTHETICAL PROTEIN. JAG2	IPI00655954 IPI00032416	1	2			
Protein binding	Receptor binding	KL	IPI00295265	·	29			
Protein binding Protein binding	Receptor binding Receptor binding	LAMA2 LIME1	IPI00218725 IPI00646802		3			90
Protein binding	Receptor binding	MIF	IPI00293276	173	363	285	251	242
Protein binding Protein binding	Receptor binding Receptor binding	MSN NCK1	IPI00514912 IPI00028065	14	9	17	22 1	
Protein binding Protein binding	Receptor binding	P11 PDGFC	IPI00006995 IPI00099977		6			
Protein binding	Receptor binding Receptor binding	PSMC5	IPI00023919	3		1	4	. 3
Protein binding Protein binding	Receptor binding Receptor binding	REEP5 REEP6	IPI00024670 IPI00646963		9		3	-
Protein binding	Receptor binding	RETN	IPI00006988		1			
Protein binding Protein binding	Receptor binding Receptor binding	SCYE1 SNW1	IPI00006252 IPI00013830	9				1
Protein binding	Receptor binding	SOCS2 SRI	IPI00033944		10		2	6
Protein binding Protein binding	Receptor binding Receptor binding	STOML2	IPI00027175 IPI00477195	14	3	3	3	11
Protein binding Protein binding	Receptor binding Receptor binding	TGFBI TMED1	IPI00018219 IPI00009976		6			
Protein binding	Receptor binding	TOLLIP	IPI00654582	2			40	
Protein binding Protein binding	Receptor binding Receptor binding	TRA1 TRAP1	IPI00027230 IPI00030275	14	77	3	16 4	
Protein binding Protein binding	Receptor binding	TRIP6 TXLNA	IPI00301561 IPI00470779	7			11	
Protein binding	Receptor binding Receptor binding	YARS	IPI00007074	,		9	4	
Protein binding Protein binding	Enzyme activator Enzyme activator	AHSA1 ALOX5AP	IPI00030706 IPI00022975	2				2
Protein binding	Enzyme activator	ARL1	IPI00219518		4			6
Protein binding Protein binding	Enzyme activator Enzyme activator	CACYBP DBNL	IPI00395627 IPI00101968	15	10	18	19	10
Protein binding Protein binding	Enzyme activator	FBLN1 FZR1	IPI00296534 IPI00383919	12	39		7	
Protein binding	Enzyme activator Enzyme activator	GM2A	IPI00018236	12			,	5
Protein binding Protein binding	Enzyme activator Enzyme activator	MAP3K7IP1 MRCL3	IPI00019459 IPI00220573		1			5
Protein binding	Enzyme activator	PLAA	IPI00550517			2	3	4
Protein binding Protein binding	Enzyme activator Enzyme activator	PSME1 PSME2	IPI00479722 IPI00384051	17 9	17 7	18 14	10 7	26
Protein binding Protein binding	Enzyme activator Enzyme activator	PSME3 PYCARD	IPI00219445 IPI00001699	9		4	1	12
Protein binding	Enzyme activator	RFC1	IPI00375358				3	2
Protein binding Protein binding	Enzyme activator Proteinase inhibitor	TIFA IPI00098880.1	IPI00514147 IPI00098880					1 1
Protein binding	Proteinase inhibitor	SERPINA1 SERPINB1	IPI00553177		28		5	
Protein binding Protein binding	Proteinase inhibitor Proteinase inhibitor	SERPINB2	IPI00027444 IPI00007117	8	53		5	4
Protein binding Protein binding	Proteinase inhibitor Proteinase inhibitor	SERPINB3 SERPINB6	IPI00022204 IPI00413451		6		2	16
Protein binding	Proteinase inhibitor	SERPINB9	IPI00032139		8		11	16
Protein binding Protein binding	Proteinase inhibitor Proteinase inhibitor	SERPINB12 SERPINC1	IPI00643202 IPI00032179	3	3			3
Protein binding	Other	XTP3TPA 39326	IPI00012197 IPI00033025	8	8	27	58	
Protein binding Protein binding	Other Other	39692	IPI00022082		1		3	
Protein binding Protein binding	Other Other	40787 42248	IPI00019376 IPI00030877	2	1 2		1	9
Protein binding	Other	ABI1	IPI00431025	4			20	
Protein binding Protein binding	Other Other	ACTA2 ACTG1	IPI00640698 IPI00021439	36	43 73		6 124	
Protein binding	Other	ACTL6A	IPI00003627	1	2		4	. 3
Protein binding Protein binding	Other Other	ACTR2 ACTR3	IPI00470573 IPI00028091		2		_	4
Protein binding Protein binding	Other Other	ADRM1 AHNAK	IPI00033030 IPI00021812	28	62		4 54	
Protein binding	Other	AKAP8L	IPI00297455	4		5	8	3
Protein binding Protein binding	Other Other	ALB ANKRD13	IPI00022434 IPI00217831	12	441			2
Protein binding Protein binding	Other Other	ANKRD28 ANKRD44	IPI00477505 IPI00395999	1		10	15 5	
Protein binding	Other	AP1B1	IPI00328257		6	9	3	g
Protein binding Protein binding	Other Other	AP1M1 AP2B1	IPI00032516 IPI00220991	71	28		3 102	
Protein binding	Other	API5	IPI00555572	2			.52	- 50
Protein binding	Other Other	ARF6 ARL6IP5	IPI00215920 IPI00007426	1	4 6		1	3
Protein binding	Other Other	ARMC8	IPI00332835	1	7		_	I .
Protein binding		ARPC4	IPI00554811		7	2	2	3
	Other	ASF1A	IPI00292168					
Protein binding Protein binding Protein binding Protein binding	Other Other	AVEN	IPI00006904	4		1	_	
Protein binding	Other Other Other Other	AVEN AXIN1 BAG2	IPI00006904 IPI00005188 IPI00000643	4		1 5 5	8	
Protein binding Protein binding Protein binding Protein binding Protein binding Protein binding	Other Other Other	AVEN AXIN1	IPI00006904 IPI00005188		1	5	8	

Destain family	Cultinarilu	Destain name	LIDLASS	Nivente		to oo		a4abaa
Protein family	Subfamily	Protein name (Sugen nomenclature for kinases when available, rest from IPI)	IPI acc. no.	HeLa	er of spec Placenta	trum-to-se Jurkat	quence m K562	Ramos
Protein binding	Other	BLOC1S1	IPI00020319					2
Protein binding Protein binding	Other Other	BUB3 C1orf19	IPI00013468 IPI00514682	7			1	5
Protein binding Protein binding	Other Other	C10rf73	IPI00550858 IPI00014230	2		4	3	1 7
Protein binding	Other	C6orf82 C9orf32	IPI00034319				-	1
Protein binding Protein binding	Other Other	C9orf89	IPI00549389 IPI00336153		2	4		6
Protein binding Protein binding	Other Other	C15orf23 C20orf18	IPI00294680 IPI00010266	1				11
Protein binding	Other	CALCOCO2	IPI00102070	19		26		15
Protein binding Protein binding	Other Other	CALD1 CALM2	IPI00014516 IPI00075248.	7	59 9	9	17	8
Protein binding Protein binding	Other Other	CAND1 CAP1	IPI00100160 IPI00639931	10	19 7	28	10	23
Protein binding Protein binding	Other Other	CAPG CAPZA1	IPI00027341 IPI00005969	1	1 12	9	15	11
Protein binding	Other	CAPZA2	IPI00026182	4	6			3
Protein binding Protein binding	Other Other	CAPZB CARHSP1	IPI00218782 IPI00304409	3	19	17	12 3	20
Protein binding Protein binding	Other Other	CAV1 CBX3	IPI00009236 IPI00297579		4	4	2	2
Protein binding	Other	CCNA2	IPI00022865	26			12	11
Protein binding Protein binding	Other Other	CCNB1 CCNB2	IPI00294696 IPI00028266	51 3		45 5	92	12 6
Protein binding Protein binding	Other Other	CCND3 CCNE2	IPI00025817 IPI00014085			3	-	6
Protein binding	Other	CCNK	IPI00431127	7		14	5	6
Protein binding Protein binding	Other Other	CCNT1 CCNT2	IPI00030247 IPI00030313	57 23		45	83 12	111
Protein binding	Other	CCT2	IPI00297779	10	8	13	11	5
Protein binding Protein binding	Other Other	CCT3 CCT4	IPI00553185 IPI00302927	10 14	5	3	14 5	17
Protein binding Protein binding	Other Other	CCT5 CCT6A	IPI00010720 IPI00027626	13 12	5	8 15	13 7	19 21
Protein binding	Other	CCT7	IPI00018465	15		18	7	17
Protein binding Protein binding	Other Other	CD81 CDC37	IPI00000190 IPI00013122	5	5	3	19	3 21
Protein binding Protein binding	Other Other	CDC45L CDC73	IPI00025695 IPI00300659	5		2	- 5	14
Protein binding	Other	CDH1	IPI00025861		2			
Protein binding Protein binding	Other Other	CEP57 ch-TOG	IPI00465200 IPI00028275				4	12
Protein binding Protein binding	Other Other	CHCHD2 CHCHD3	IPI00007673 IPI00015833	14	27 27	30	5 7	4 24
Protein binding	Other	CHCHD6	IPI00031622	6	2	7	2	
Protein binding Protein binding	Other Other	CIB1 CKAP1	IPI00018451 IPI00293126			1		1
Protein binding Protein binding	Other Other	CLTC CNAP1	IPI00024067 IPI00299524	53 7	41	33 16	38	45 13
Protein binding	Other	CNN2	IPI00015262	8	2	7	4	25
Protein binding Protein binding	Other Other	CNN3 COG4	IPI00216682 IPI00149849		1		1	1
Protein binding Protein binding	Other Other	COG5 COG7	IPI00377050 IPI00164005	3		7	5	2
Protein binding	Other	COL6A1	IPI00291136		10	·	_ v	
Protein binding Protein binding	Other Other	COL6A2 COL14A1	IPI00304840 IPI00176193		53 53			
Protein binding Protein binding	Other Other	COPB CORO1A	IPI00295851 IPI00010133	33	26	21	24	32 5
Protein binding	Other	CORO1C	IPI00008453	13	1	15	8	15
Protein binding Protein binding	Other Other	CPSF3L	IPI00026219 IPI00063404			15	3	15
Protein binding Protein binding	Other Other	CTNNA1 CTNND1	IPI00473136 IPI00182540	9	8 7			
Protein binding Protein binding	Other Other	CTTN CUL1	IPI00062884 IPI00014310	11 q	4			
Protein binding	Other	CUL2	IPI00014311	9		1		
Protein binding Protein binding	Other Other	CUL3 DAAM1	IPI00014312 IPI00337800			9	1	4 5
Protein binding Protein binding	Other Other	DAG1 DCTN1	IPI00028911 IPI00029485	7	1	18		14
Protein binding	Other	DCTN3	IPI00027014		2	10		1
Protein binding Protein binding	Other Other	DEPDC6 DIABLO	IPI00290560 IPI00008418		2		4	9
Protein binding Protein binding	Other Other	DKFZP564A022 PROTEIN. DMXL1	IPI00384679 IPI00294728		4			1
Protein binding	Other	DNAJA2	IPI00032406	7		4	6	8
Protein binding Protein binding	Other Other	DNAJA3 DNAJA5	IPI00294610 IPI00413366	1				5
Protein binding Protein binding	Other Other	DNAJB6 DNAJB11	IPI00556073 IPI00008454	1				4
Protein binding	Other	DNAJB12	IPI00014400					3
Protein binding Protein binding	Other Other	DNAJC7 DNAJC12	IPI00329629 IPI00029149	6 3				11
Protein binding Protein binding	Other Other	DNAJC14 DNAJC19	IPI00396326 IPI00304306	3 5	1	3	6	2
Protein binding	Other	DPT	IPI00292130	_ ĭ	2			
Protein binding Protein binding	Other Other	DRG1 DRIM	IPI00031836 IPI00004970	5			1	23
Protein binding Protein binding	Other Other	DSC1 DSG1	IPI00386975 IPI00025753	22	20	22	17	3
Protein binding Protein binding	Other Other	DSP DSTN	IPI00013933 IPI00473014	81	63 15	28	40	
Protein binding	Other	DYSF	IPI00020210		55		·	ь
Protein binding Protein binding	Other Other	EEF1E1 EFS	IPI00003588 IPI00011652	-	3 19		11	7
Protein binding	Other	EIF3S6IP	IPI00465233	12	2		4	20
Protein binding Protein binding	Other Other	ELAVL1 ELMO1	IPI00301936 IPI00219532		2		4	7
Protein binding Protein binding	Other Other	EMD ENG	IPI00032003 IPI00017567	8	6		2	10
Protein binding	Other	EPB41L2	IPI00015973				2	
Protein binding Protein binding	Other Other	EPB41L3 ERGIC1	IPI00032230 IPI00022887	7	24 8		6	10
Protein binding Protein binding	Other Other	EVL EWSR1	IPI00218245 IPI00009841	38	4	31	37	2 31
Protein binding	Other	EWSR1	IPI00335961	2			3/	
Protein binding Protein binding	Other Other	FANCA FANCD2	IPI00006170 IPI00075081	3 15	-	5 26		10 11

Protein family	Subfamily	Protein name	IPI acc. no.	Numb	er of spect	trum-to-se	quence m	atches
Í	,	(Sugen nomenclature for kinases when available, rest from IPI)		HeLa		Jurkat	K562	Ramos
	Other Other	FBXO6 FGA	IPI00171291 IPI00021885		14		1	
Protein binding	Other	FGB	IPI00298497		10			
	Other Other	FGG FIBP	IPI00021891 IPI00012443	32	22 14	26	20	74
Protein binding	Other	FIS1	IPI00007052	2	4	2	1	4
	Other Other	FLJ12529 FLJ14668	IPI00550821 IPI00303722	4		2	1	2
	Other Other	FLJ20297 FLNA	IPI00007929 IPI00333541	17	171	50	24	12
Protein binding	Other	FLNB	IPI00289334	17	29	36	34	
	Other Other	FLNC FLOT1	IPI00178352 IPI00027438				64	4
Protein binding	Other	FLOT2	IPI00386741					4
	Other Other	FSCN1 FUS	IPI00163187 IPI00260715	27		29	9 16	21
	Other Other	FXR1 G1P2	IPI00016249 IPI00375631	5	1	6 8		
Protein binding	Other	GEMIN4	IPI00027717	12	'	17	5	2
	Other Other	GEMIN5 GEMIN6	IPI00291783 IPI00103087	21		1	1	14
Protein binding	Other	GEMIN7	IPI00003027					2
	Other Other	GMCL1 GOLGA2	IPI00063669 IPI00478549	3		11	4	1
	Other	GOLGB1 GRPEL1	IPI00004671 IPI00029557	10		10	15	13
	Other Other	GSN	IPI00026314		4			
	Other Other	HAX1 HBXIP	IPI00010440 IPI00012831	3				9
Protein binding	Other	HEATR1	IPI00024279	50		14	20	19
	Other Other	HIRIP5 HIST3H2A	IPI00455153 IPI00219037	7	17	1 5	2 11	12
Protein binding	Other	HMG1L1	IPI00419258	38	14		18	11
	Other Other	HNRPA1 HNRPA2B1	IPI00215965 IPI00396378	3			5 2	2
Protein binding	Other Other	HNRPC HNRPF	IPI00216592 IPI00003881	4	6	6	11	16
Protein binding	Other	HNRPH1	IPI00479191	11	7	3	12	
	Other Other	HNRPK HSPA9B	IPI00216746 IPI00007765	15 186		14 46	5 127	10 75
Protein binding	Other	HSPBP1	IPI00100748	4		-		7
	Other Other	HSPC152 IGFBP1	IPI00106374 IPI00031086	3	1	2	2	4
	Other Other	IGHA1	IPI00430842 IPI00178926		1 4	- 1		8
	Other	IGSF8	IPI00056478			1		
	Other Other	IMMT INCENP	IPI00009960 IPI00024970	32 27	62	72 45	39 37	76 38
Protein binding	Other	INT1	IPI00175295	9		5	0.	4
	Other Other	ISGF3G ISOC2	IPI00094740 IPI00003031		7	9	41	17
Protein binding	Other	IVNS1ABP JUP	IPI00014319 IPI00554711	11	28	5 9	15	2 17
	Other Other	KBTBD7	IPI00383044	- 11	20	9	15	1
	Other Other	KEAP1 KIAA0174	IPI00106502 IPI00024660	3	4	2		15
Protein binding	Other	KIAA1604	IPI00177381			4	1	2
	Other Other	KIAA1698 KLHL23	IPI00304676 IPI00062213			10		1
Protein binding	Other	LAMB1	IPI00013976		1 9			
	Other Other	LAMC1 LAT2	IPI00298281 IPI00395993		9			4
	Other Other	LCP1 LIN7C	IPI00010471 IPI00019997		9	29	10	35
Protein binding	Other	LMNA	IPI00021405	2	6	J	3	6
	Other Other	LOC149329 LOC391039	IPI00554749 IPI00457307	12	24 31	15 11	27 29	107 17
Protein binding	Other	LSM8	IPI00219871	1	-			1
	Other Other	LSM14A LUZP5	IPI00478300 IPI00396058	3		6	4	12
Protein binding Protein binding	Other Other	MAD2L1 MAD2L2	IPI00012369 IPI00645963			5	4	10
Protein binding	Other	Magmas	IPI00218463	1			2	3
	Other Other	MAGOH MAPRE1	IPI00641469 IPI00017596	4	1	1	4	
Protein binding	Other	MARCKS	IPI00219301		19			
	Other Other	MARCKSL1 MGC52010	IPI00641181 IPI00219006	1			1	4
Protein binding	Other	MIG12 MNAT1	IPI00009730			5	07	3
Protein binding	Other Other	MSH2	IPI00294701 IPI00017303	58	6	48	87 6	72
	Other Other	MTPN MUTED	IPI00179589 IPI00154778		1	1	2	3
Protein binding	Other	MYH9	IPI00019502	139	10	59	47	
	Other Other	MYH10 MYH11	IPI00397526 IPI00020501	32	2 18	3	13	
Protein binding	Other	MYO1B	IPI00376344			1		
	Other Other	MYO1C MYO1F	IPI00010418 IPI00414576		1			3
	Other	NAP1L1 NAP1L4	IPI00023860	3		1	1	
	Other Other	NCBP1	IPI00017763 IPI00019380	5		3	8	
Protein binding Protein binding	Other	NCBP2 NCKAP1	IPI00183500 IPI00409684	22	7		86 86	
Protein binding Protein binding Protein binding			IPI00409084		3			
Protein binding Protein binding Protein binding Protein binding Protein binding Protein binding	Other Other	NID1				. 2		2
Protein binding	Other	NID1 NIFIE14 NOMO1	IPI00020944 IPI00013293 IPI00465432	3		1	2	
Protein binding	Other Other Other Other Other Other	NIFIE14 NOMO1 NONO	IPI00013293 IPI00465432 IPI00304596	3 12		1 5	8	12
Protein binding	Other Other Other Other	NIFIE 14 NOMO1 NOMO1 NONO NUDT21 NUMA1	IPI00013293 IPI00465432 IPI00304596 IPI00646917 IPI00292771	3 12 2 6	2	1 5 2 48	8 3	2
Protein binding	Other	NIFIE14 NOMO1 NONO NUDT21 NUMA1 NUP85	IPI00013293 IPI00465432 IPI00304596 IPI00646917 IPI00292771 IPI00171542	2 6 3	2	2 48 4	8 3 5	5 5
Protein binding	Other	NIFIE14 NOMO1 NOMO NONO NUDT21 NUMA1 NUP85 NUP205 NUP210	IPI00013293 IPI00465432 IPI00304596 IPI00646917 IPI00292771 IPI00171542 IPI00472675 IPI00291755	2	21	2 48	8 3	2 5 4 82
Protein binding	Other	NIFIE14 NOMO1 NONO NUDT21 NUMA1 NUP85 NUP205 NUP210 NUX71	IPI00013293 IPI00465432 IPI00304596 IPI00646917 IPI00292771 IPI00171542 IPI00472675 IPI00291755 IPI00007605	2 6 3 78	21	2 48 4 101	8 3 5	5 4 82
Protein binding	Other	NIFIE14 NOMO1 NONO NUDT21 NUMA1 NUP85 NUP205 NUP210 NXT1 PABPN1 PARVA	IPI00013293 IPI00465432 IPI00304596 IPI00646917 IPI00292771 IPI00171542 IPI00291755 IPI00091755 IPI00007605 IPI00005792 IPI00018963	2 6 3 78 14	21	2 48 4 101 23	8 3 5	5 4 82
Protein binding	Other	NIFIE 14 NOMO1 NOMO NUDT21 NUMA1 NUPB5 NUP205 NUP210 NXT1 PABPN1	IPI00013293 IPI00465432 IPI00304596 IPI00646917 IPI00292771 IPI00171542 IPI00472675 IPI00291755 IPI00007605	2 6 3 78 14	21	2 48 4 101 23 1	8 3 5	5 4 82

Destain formit	0 1 (1	D. 14	Libi	Monte		of spectrum-to-sequence match		
Protein family	Subfamily	Protein name (Sugen nomenclature for kinases when available, rest from IPI)	IPI acc. no.	Numb HeLa	er of spec Placenta	trum-to-se Jurkat	quence m K562	Ramos
Protein binding	Other	PCDH9	IPI00409626	5	Пасста	ourkat	ROOZ	Ramos
Protein binding Protein binding	Other Other	PDCD6IP PDLIM2	IPI00246058 IPI00396593	6	11	4	9	4
Protein binding	Other	PEF1	IPI00018235	5	6	8	4	9
Protein binding Protein binding	Other Other	PEX3 PEX11B	IPI00010232 IPI00021978	2	2	10	5	9
Protein binding	Other	PFDN2	IPI00006052	2	2	2	6	5
Protein binding Protein binding	Other Other	PHKB PIP	IPI00218571 IPI00022974	41	17 7		16 2	24
Protein binding Protein binding	Other Other	PKP1 PLEC1	IPI00071509 IPI00014898		3		37	2 59
Protein binding	Other	PLEKHC1	IP100014696		6		31	39
Protein binding Protein binding	Other Other	POTE2 PRPF8	IPI00455547 IPI00007928			8	33	1
Protein binding	Other	PRPF40A	IPI00337387			5	6	3
Protein binding Protein binding	Other Other	PSMD2 PSMD9	IPI00012268 IPI00010860	22	8	-	12 4	9
Protein binding	Other	PTBP1	IPI00183626	9	14	3	8	11
Protein binding Protein binding	Other Other	PURB PXN	IPI00045051 IPI00220031		1 15			2
Protein binding Protein binding	Other Other	RAB1A RABL3	IPI00005719 IPI00102897	8	14		6	7
Protein binding	Other	RAE1	IPI00102697		6	14	- /	10
Protein binding Protein binding	Other Other	RAI14 RALB	IPI00292953 IPI00444204		1 3		1	
Protein binding	Other	RAP1A	IPI00444204 IPI00015148		6		4	3
Protein binding Protein binding	Other Other	RASSF2 RASSF5	IPI00414179 IPI00332633			7	2	6
Protein binding	Other	RBBP5	IPI00021035			1	1	2
Protein binding Protein binding	Other Other	RBBP7 RBL1	IPI00646512 IPI00005139			3	2	4
Protein binding	Other	RBL2	IPI00304028			15	6	8
Protein binding Protein binding	Other Other	RBMXL1 RBX1	IPI00304692 IPI00003386	7	2	8	9	0
Protein binding	Other	RCD-8	IPI00376317	12	ь	6		1
Protein binding Protein binding	Other Other	RDX REPS1	IPI00017367 IPI00337532	13 25	-	-	2	10
Protein binding	Other	RGS19	IPI00028108					7
Protein binding Protein binding	Other Other	RNF7 RRAS2	IPI00033132 IPI00012512	3	1	2	2	2
Protein binding	Other	RTN4	IPI00021766		1			
Protein binding Protein binding	Other Other	SAMSN1 SCC-112	IPI00185526 IPI00303063	2		20	4	8
Protein binding	Other	SDC1	IPI00002441	ŕ	9	20		
Protein binding Protein binding	Other Other	SDFR1 SERBP1	IPI00018311 IPI00410693	10	1 3	5	5	7
Protein binding	Other	SERF2	IPI00024781	3	Ŭ	Ů	Ĭ	8
Protein binding Protein binding	Other Other	SERF2 SF3B3	IPI00335001 IPI00300371	14		22	14	17
Protein binding	Other	SF3B4	IPI00017339				1	
Protein binding Protein binding	Other Other	SFPQ SFRS1	IPI00010740 IPI00218591	22	6	21	23	30
Protein binding	Other	SFRS3	IPI00010204	-	3	_		
Protein binding Protein binding	Other Other	SFRS7 SGTA	IPI00003377 IPI00013949				2	2
Protein binding	Other	SH2D1A	IPI00032401			2	- 40	
Protein binding Protein binding	Other Other	SH2D2A SH3BGRL	IPI00220388 IPI00025318			2	12 1	
Protein binding	Other	SHANK2	IPI00643662	8			200	
Protein binding Protein binding	Other Other	SHC1 SIAHBP1	IPI00021326 IPI00069750	6			20	14
Protein binding Protein binding	Other Other	SIMILAR TO U2 SMALL NUCLEAR RIBONUCLEOPROTEIN B.	IPI00550235 IPI00024281	2	1			
Protein binding	Other	SKP1A	IPI00024261	3	6	6	6	10
Protein binding Protein binding	Other Other	SMC2L1 SMC4L1	IPI00007927 IPI00411559	7 26		16 41	2	35 26
Protein binding	Other	SMCHD1	IPI00411333	20		41	3	20
Protein binding Protein binding	Other Other	SMN1 SMNDC1	IPI00003394 IPI00025176	4		1 2		5
Protein binding	Other	SNAP23	IPI00010438		4			8
Protein binding Protein binding	Other Other	SNAPAP SNRPA	IPI00018331 IPI00012382			1	2	2
Protein binding	Other	SNRPB	IPI00329512				_	4
Protein binding Protein binding	Other Other	SNRPB2 SNRPD1	IPI00029267 IPI00302850	1 3		2	4 6	3
Protein binding	Other	SNRPD2	IPI00017963	7	4	9	16	13
Protein binding Protein binding	Other Other	SNRPD3 SNRPE	IPI00017964 IPI00029266	3	3	4	5 3	8
Protein binding	Other	SNRPG	IPI00016572					1
Protein binding Protein binding	Other Other	SNTB1 SNTB2	IPI00026059 IPI00009505			<u> </u>	<u> </u>	8 17
Protein binding Protein binding	Other Other	SNX1 SNX22	IPI00183530 IPI00307039		5			3 13
Protein binding	Other	SPTAN1	IPI00478292			131	84	13
Protein binding Protein binding	Other Other	SPTBN1 SQSTM1	IPI00005614 IPI00179473	4	5	72	106	
Protein binding	Other	SSR3	IPI00009235	·	2	2		2
Protein binding Protein binding	Other Other	SSRP1 STMN1	IPI00005154 IPI00479997	19	5		18	7
Protein binding	Other	STN2	IPI00103521		3		8	
Protein binding Protein binding	Other Other	STRN4 STX4A	IPI00003016 IPI00029730	1	2	-	-	1
Protein binding	Other	STX18	IPI00027194					1
Protein binding Protein binding	Other Other	SUMO2 SYMPK	IPI00140827 IPI00023344	1		3		7
Protein binding	Other	SYNE1	IPI00386444			J		9
Protein binding Protein binding	Other Other	SYNE2 SYVN1	IPI00239406 IPI00166996	3	-	4	-	26 8
Protein binding	Other	TAGLN	IPI00216138	·	57	•		·
Protein binding Protein binding	Other Other	TANK TBCA	IPI00299166 IPI00217236	182	124	215	225 5	585
Protein binding	Other	TCEB1	IPI00300341	8	_	8	5	7
Protein binding Protein binding	Other Other	TCEB2 TCL1A	IPI00410162 IPI00178749	4	1	5	6	16 13
Protein binding	Other	TCP1	IPI00290566	11	5			12
Protein binding Protein binding	Other Other	THOC4 TMEM4	IPI00328840 IPI00443909	11	1	24	13	24
Protein binding	Other	TMPO	IPI00030131				1	
Protein binding Protein binding	Other Other	TMPO TNIP1	IPI00216230 IPI00237449	-	-	-	2	7
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Protein family	Subfamily		IPI acc. no.	Numh	er of spec	trum-to-se	allence m	atches
1 Totell Talliny	Gubianiny	(Sugen nomenclature for kinases when available, rest from IPI)	ii i acc. no.	HeLa	Placenta	Jurkat	K562	Ramos
Protein binding Protein binding	Other Other	TNKS1BP1 TNS1	IPI00304589 IPI00307545	102	4			
Protein binding	Other	TPD52	IPI00218323	102	1			2
Protein binding Protein binding	Other Other	TPD52L2 TPM1	IPI00399265 IPI00218319	21	3 15		19	9
Protein binding Protein binding	Other Other	TPM1 TPM2	IPI00442122 IPI00220709		8			
Protein binding	Other	TPM4	IPI00216975		28	4		
Protein binding Protein binding	Other Other	TRAF3 TRAF5	IPI00297473 IPI00005760			4		2
Protein binding Protein binding	Other Other	TRIM31 TRIM59	IPI00643935 IPI00432462	2			32	
Protein binding	Other	TRIM65	IPI00419451			2	32	2
Protein binding Protein binding	Other Other	U2AF1 UBAP2L	IPI00619914 IPI00412535	6	4		3	5 11
Protein binding	Other	URP2 UTRN	IPI00397834	1		0.4	1	1 211
Protein binding Protein binding	Other Other	UTRN	IPI00009329 IPI00514575			31 4	1	6
Protein binding Protein binding	Other Other	VAMP3 VASP	IPI00514389 IPI00301058		3		4	
Protein binding	Other	VBP1	IPI00334159			2	·	
Protein binding Protein binding	Other Other	VIL2 VIM	IPI00479359 IPI00418471	4	53 7		24	5
Protein binding Protein binding	Other Other	VPS28 VPS35	IPI00328913 IPI00018931	1	4	_	3 5	
Protein binding	Other	VWF	IPI00023014		7	_		
Protein binding Protein binding	Other Other	WASF2 WBP2	IPI00472164 IPI00032050	5			14	1
Protein binding	Other	WDR1	IPI00216256		7	4	-	
Protein binding Protein binding	Other Other	WDR5 WDR68	IPI00005492 IPI00006754	8	2		15	17
Protein binding Protein binding	Other Other	XPO5 YWHAE	IPI00640703 IPI00000816	51 123	5 72		52 150	41 80
Protein binding	Other	YWHAQ	IPI00018146	30	19	57	68	89
Protein binding Protein binding	Other Other	YWHAZ ZMYM1	IPI00180776 IPI00643628	2	53	8	3	116
Protein binding	Other	ZNF294	IPI00015593	46	6		8	31
Protein binding Protein binding	Other Other	ZNF313 ZNF364	IPI00032955 IPI00337608	1		5		
Protein binding Protein binding	Other Other	ZNF598 ZW10	IPI00328737 IPI00011631	1 2				3
Protein binding	Other	ZYX	IPI00020513		9			
Transporter Transporter	Amine Amine	SLC1A4 SLC1A5	IPI00015476 IPI00019472		2			1 6
Transporter	Amine	SLC7A1	IPI00027728	40	_	1	47	
Transporter Transporter	Amine Amine	SLC7A5 SLC7A8	IPI00008986 IPI00296114	13	6	8	17	22
Transporter Transporter	Amine Amine	SLC7A11 SLC25A22	IPI00010474 IPI00003004	39	3		4	1 7
Transporter	Amine	SLC38A1	IPI00023030	1	-			1
Transporter Transporter	Antigen Drug	TAP2 EBP	IPI00328112 IPI00008599	3	2	6 8	1	11 8
Transporter Transporter	Ion Ion	ATP1A1 ATP1B3	IPI00006482 IPI00008167	15	14	13	2	31
Transporter	lon	ATP2A2	IPI00219078	38	34		31	60
Transporter Transporter	lon lon	ATP2A3 ATP2B1	IPI00303760 IPI00021695		23	2	3 1	5 3
Transporter	Ion Ion	ATP2B2 ATP2B4	IPI00009791 IPI00012490		8			1
Transporter Transporter	lon	ATP2C1	IPI00607568		7	3		3
Transporter Transporter	Ion Ion	ATP5A1 ATP5B	IPI00440493 IPI00303476	25 27	22 12		13 15	21 16
Transporter	lon	ATP5C1	IPI00478410	18	9	9	8	8
Transporter Transporter	lon lon	ATP5D ATP5F1	IPI00024920 IPI00029133		7	2 11	11	21
Transporter Transporter	Ion Ion	ATP5H ATP5I	IPI00220487 IPI00218848		10	9	7	19
Transporter	lon	ATP5J2	IPI00220300	4		5		2
Transporter Transporter	lon lon	ATP5L ATP5O	IPI00027448 IPI00007611	2	4 16		3 20	7 28
Transporter Transporter	Ion Ion	ATP6_HUMAN ATP6V0A2	IPI00654820 IPI00000425			2	2	6 13
Transporter	lon	ATP6V1A	IPI00007682		5		3	13
Transporter Transporter	lon lon	ATP6V1H CACNA1A	IPI00296191 IPI00217498	1	2		2	2
Transporter	lon	CLIC1	IPI00010896	2	7 5		9	3
Transporter Transporter	lon lon	CLIC3 CLIC4	IPI00000692 IPI00001960		5		2	
Transporter Transporter	Ion Ion	CLIC5 COX2	IPI00027193 IPI00017510		<u>2</u>			6
Transporter	lon	COX4I1	IPI00006579	5	Ŭ	4	3	8
Transporter Transporter	lon lon	COX5A COX6B1	IPI00025086 IPI00216085				3 1	1
Transporter Transporter	Ion Ion	COX17 HEPH	IPI00477819 IPI00107855				1	1
Transporter	lon	ITPR1	IPI00333753				Ĭ	7
Transporter Transporter	lon lon	ITPR2 ITPR3	IPI00031545 IPI00291607		5	36	9	5 3
Transporter Transporter	Ion Ion	KCTD5 KCTD12	IPI00004506 IPI00060715		4			2
Transporter	lon	LASP1	IPI00386803		39			
Transporter Transporter	Ion Ion	MGC15619 MON2	IPI00153005 IPI00465246	33	4	11	1 3	2 24
Transporter	lon	NNT	IPI00337541		<u> </u>	8	1	6
Transporter Transporter	lon lon	NOLA1 NUP153	IPI00302176 IPI00292059			1		4
Transporter Transporter	Ion Ion	PLP2 SFXN3	IPI00030362 IPI00329606		11			
Transporter	lon	SIMILAR TO VOLTAGE-DEPENDENT ANION-SELECTIVE CHAN	IPI00056004		3			4
Transporter Transporter	Ion Ion	SLC3A2 SLC4A1	IPI00554481 IPI00022361	45	12 4		8	10
Transporter	lon	SLC5A6	IPI00031822		3		2	
Transporter Transporter	Ion Ion	SLC9A3R1 SLC12A2	IPI00003527 IPI00022649		2			6
Transporter Transporter	Ion Ion	SLC22A18 SLC25A3	IPI00410347 IPI00022202	2 49	88	56	38	74
Transporter	lon	SLC25A11	IPI00219729	2	28	8		2
Transporter Transporter	lon lon	SLC25A12 SLC25A13	IPI00386271 IPI00007084		9	3		6
	Ion	SLC30A7	IPI00302605	7	6			3

Drotoin family	Cubfomily	Drotain name	IDI occ. no.	Number of spectrum-to-sequence match				otoboo
Protein family	Subfamily	Protein name (Sugen nomenclature for kinases when available, rest from IPI)	IPI acc. no.	HeLa	Placenta	Jurkat	K562	Ramos
Transporter	Ion	SLC39A1	IPI00100585	1				
Transporter Transporter	lon lon	SLC39A3 SLC39A9	IPI00029337 IPI00020030			1	3	
Transporter Transporter	Ion Ion	SLC40A1 UQCRC2	IPI00005547 IPI00305383	2	4		1	5
Transporter	Ion	VDAC2	IPI00024145	16		20	19	63
Transporter Transporter	Ion Ion	VDAC3	IPI00294779 IPI00022463	7	73	6	2	4
Transporter	Lipid	APOA1	IPI00021841		39			
Transporter Transporter	Lipid Lipid	APOB APOE	IPI00022229 IPI00021842		169 7			
Transporter Transporter	Lipid Lipid	CDIPT HDLBP	IPI00374969 IPI00022228	7	11	2	2	5
Transporter	Lipid	HSD17B4	IPI00019912	36	33		872	7
Transporter Transporter	Lipid Lipid	KIAA1212 LDLR	IPI00171134 IPI00000070	2				
Transporter Transporter	Lipid Lipid	LRP1 RFT1	IPI00020557 IPI00059368	4	32 1	7	8	
Transporter	Lipid	SLCO2A1	IPI00295132	4	2		0	0
Transporter Transporter	Lipid Mitochondrial	SORL1 FXC1	IPI00022608 IPI00001538	5	3	6	4	71
Transporter	Mitochondrial	MCFP	IPI00290827					5
Transporter Transporter	Mitochondrial Mitochondrial	MTCH2 SIMILAR TO MITOCHONDRIAL IMPORT INNER MEMBRANE TR	IPI00003833 IPI00549865	1	3	4		7
Transporter Transporter	Mitochondrial Mitochondrial	SLC25A35 TIMM9	IPI00654813 IPI00001541		3		6	7
Transporter	Mitochondrial	TIMM10	IPI00001543	2			6	6
Transporter Transporter	Nucleic acid Nucleic acid	SLC25A4 SLC25A5	IPI00022891 IPI00007188	12	3 27	40	13	3 63
Transporter	Nucleoporin	NUP35	IPI00329650					1
Transporter Transporter	Nucleoporin Nucleoporin	NUP37 NUP88	IPI00171665 IPI00001738	1 2	<u> </u>	1	2	1
Transporter	Nucleoporin	NUP93 NUP98	IPI00397904	5	3	22		12
Transporter Transporter	Nucleoporin Nucleoporin	NUP133	IPI00337397 IPI00291200	1		1		
Transporter Transporter	Nucleoporin Nucleoporin	NUP155 NUP188	IPI00026625 IPI00477040	31 40	7	21 25	17	36 26
Transporter	Nucleoporin	NUP214	IPI00183294	40		23		20
Transporter Transporter	Nucleoporin Nucleoporin	SEH1L TMEM48	IPI00220609 IPI00386760			2	1	2 14
Transporter	Nucleoporin	TPR	IPI00022970			1		22
Transporter Transporter	Nucleoporin Nucleotide	XPO4 C6orf108	IPI00028357 IPI00007926	8	1		9	22
Transporter	Organic acid	SLC16A1	IPI00024650	3	5			23
Transporter Transporter	Organic acid Organic acid	SLC16A3 SLC16A7	IPI00006666 IPI00386167	1	5			3
Transporter Transporter	Organic acid Organic acid	SLC25A1 SLC25A10	IPI00294159 IPI00217277	4	7	5		4
Transporter	Peptide	ABCB7	IPI00556553	6		J		
Transporter Transporter	Peptide Peptide	SLC38A5 TAP1	IPI00102509 IPI00646625	1		9		5
Transporter	Protein	AP1S1	IPI00152898		2		4	1
Transporter Transporter	Protein Protein	AP2S1 C3orf1	IPI00219840 IPI00299387	9	5	2	15	13
Transporter Transporter	Protein Protein	COG2 COPA	IPI00000057 IPI00295857	25	10	11	7	5 27
Transporter	Protein	COPB2	IPI00220219	8	6		4	2
Transporter Transporter	Protein Protein	COPE CSE1L	IPI00465132 IPI00022744	42	2 26		26	42
Transporter	Protein	IPO4	IPI00398009	5		13	7	
Transporter Transporter	Protein Protein	IPO7 IPO8	IPI00007402 IPI00007401	37 7	11	17 8	27 4	46 2
Transporter Transporter	Protein Protein	IPO9 IPO11	IPI00514686 IPI00301107	9	3	12 20	9 17	13
Transporter	Protein	IPO13	IPI00005651	·	1	2	1	
Transporter Transporter	Protein Protein	KPNA2 KPNA3	IPI00002214 IPI00299033	3				1 5
Transporter	Protein	KPNA4	IPI00012578	3		1	1	8
Transporter Transporter	Protein Protein	KPNA5 KPNB1	IPI00413214 IPI00001639	10	8	9	12	10
Transporter Transporter	Protein Protein	MTX2 SEC13L1	IPI00025717 IPI00375370	1 5	3	3	2 14	6 10
Transporter	Protein	SEC61A1	IPI00218466	46	20	11	19	17
Transporter Transporter	Protein Protein	SEC61B SLC25A17	IPI00220835 IPI00014440	6	6	6	7	6
Transporter	Protein	SORT1	IPI00217882		_	4	3	
Transporter Transporter	Protein Protein	STX7 STX12	IPI00289876 IPI00329332		5			2
Transporter Transporter	Protein Protein	TIMM23 TIMM44	IPI00007309 IPI00306516					4
Transporter	Protein	TNPO1	IPI00024364	22			16	19
Transporter Transporter	Protein Protein	TNPO2 TOMM20	IPI00409698 IPI00016676		2	3	2	3
Transporter	Protein	VDAC1	IPI00216308	15	54		27	79
Transporter Transporter	Protein Protein	VDP XPO1	IPI00031583 IPI00298961	48	4 27		4 39	21
Transporter	Protein	XPO6	IPI00639925 IPI00302458	12		13	10	14
Transporter Transporter	Protein Sugar	XPO7 SLC2A1	IPI00302458 IPI00220194	10	21 61	27	26	9 19
Transporter Transporter	Sugar Sugar	SLC2A5 SLC2A14	IPI00027452 IPI00152505				3	2
Transporter	Sugar	SLC37A4	IPI00217409				1	1
Transporter Transporter	Trafficking Vitamin	TRAPPC3 TTR	IPI00004324 IPI00022432		5 7		2	
Transporter	Amino acid	SLC43A2	IPI00171004		16			
Transporter Transporter	ER / Golgi ER / Golgi	SEC22L1 SEC23A	IPI00006865 IPI00017375	7	12 10			9
Transporter	ER / Golgi	SEC23B	IPI00017376	6	4		9	16
Transporter Transporter	ER / Golgi ER / Golgi	SEC23IP SEC24B	IPI00026969 IPI00030851		4			5 2
Transporter Transporter	ER / Golgi Other	SEC24C ABCB8	IPI00024661 IPI00019022	5	6	5	7	26
Transporter	Other	ABCB10	IPI00015826	·		3		4
Transporter Transporter	Other Other	ABCD1 ABCD3	IPI00291373 IPI00002372	7	10	8		10
Transporter	Other	ABCF1	IPI00302146		2		2	- 10
Transporter Transporter	Other Other	ECM1 GC	IPI00645849 IPI00555812	1	8		1	
Transporter	Other	HBB	IPI00382950	5	148	2	5	4
Transporter	Other	HBB	IPI00472787	l .	6	l		

Protein family S	C. defense il.	Destain a see a	n namo		er of spectrum-to-sequence i			matches		
Protein family	Subfamily	Protein name (Sugen nomenclature for kinases when available, rest from IPI)	IPI acc. no.	HeLa	Placenta	Jurkat	K562	Ramos		
Transporter	Other	HBG1	IPI00030809	1	334		13	3		
Transporter Transporter	Other Other	HBZ HBZ	IPI00334432 IPI00480146	3	295 5	2	10	6		
Transporter	Other Other	HPX KIAA1012	IPI00022488 IPI00007253		5			1		
Transporter Transporter	Other	NAPA	IPI00009253				1	ı		
Transporter Transporter	Other Other	NAPB NUP160	IPI00651644 IPI00221235	17	7	30		24		
Transporter	Other	PPGB	IPI00640525		1					
Transporter Transporter	Other Other	SLC25A4 SLC33A1	IPI00291467 IPI00006205	24 1	71	12 1	6 2	14		
Transporter	Other	SLC35E1	IPI00101952	1	3	2	1 8	7		
Transporter Transporter	Other Other	SNAP29 SV2A	IPI00032831 IPI00644025	1		2	8	0		
Receptor Receptor	-	(XM_374569) SIMILAR TO T CELL RECEPTOR BETA. B2M	IPI00397415 IPI00004656	6		5 3	3	5		
Receptor	Ē	BCAM	IPI00002406	Ŭ	4					
Receptor Receptor	-	BZRP CD2	IPI00026850 IPI00027484			8		2		
Receptor	-	CD3D	IPI00022934			1				
Receptor Receptor	-	CD3E CD3G	IPI00012923 IPI00016020			1				
Receptor Receptor	-	CD3Z CD4	IPI00218634 IPI00003983		1	8 28				
Receptor	-	CD38	IPI00006071			20		10		
Receptor Receptor	-	CD79A CD79B	IPI00008473 IPI00027668					7		
Receptor	Ē	CLDN4	IPI00021944		4					
Receptor Receptor	-	COLEC12 CRIM1	IPI00247616 IPI00009294		4					
Receptor	-	CRSP3	IPI00477404	34		60	17	27		
Receptor Receptor	-	CXCR4 DERL1	IPI00216445 IPI00013271		3	4		23 6		
Receptor Receptor	-	DMBT1 DOCK10	IPI00553058 IPI00333770			2		2		
Receptor	-	ELOVL4	IPI00009295			2		3		
Receptor Receptor	-	EPS15 FBN1	IPI00292134 IPI00328113		2		7			
Receptor	-	FCGR2B	IPI00013971		1		2			
Receptor Receptor	-	FCRLM1 FKBP1A	IPI00292096 IPI00413778	3	4	9	6	15 4		
Receptor	-	FKBP3	IPI00024157	2	2					
Receptor Receptor	-	FLVCR GPR89	IPI00022344 IPI00008847	4	6		2	11		
Receptor Receptor	-	GUCY1B3 HLA-A	IPI00289033 IPI00472882	12	2			2		
Receptor	-	HLA-B	IPI00472073		2			2		
Receptor Receptor	-	HLA-B	IPI00604445 IPI00646083	8				4		
Receptor	-	HLA-BW62 ANTIGEN (FRAGMENT).	IPI00604470					1		
Receptor Receptor	-	HLA-CW3 (FRAGMENT).	IPI00472162 IPI00553154	8		3		11		
Receptor	-	HLA-DOB HLA-DQA1	IPI00010410 IPI00719648					1		
Receptor Receptor	-	HLA-DQB2	IPI00472169					1		
Receptor Receptor	-	HLA-DRB1 HMMR	IPI00472236 IPI00337772	11		6	10	9 14		
Receptor	-	HPGD	IPI00305286	''	54	1	4	14		
Receptor Receptor	-	ICAM1 IGF2R	IPI00008494 IPI00289819	4	<u>1</u> 5	37	28	1 20		
Receptor	-	IL28RA	IPI00216651					3		
Receptor Receptor	-	ITGA1 ITGA3	IPI00472202 IPI00290043		3					
Receptor	-	ITGA4 ITGA5	IPI00009803 IPI00306604		10	10	4	1		
Receptor Receptor	-	ITGA6	IPI00010697		10		4			
Receptor Receptor	-	ITGAL ITGB1	IPI00219896 IPI00217561		20	1		7		
Receptor	-	ITGB2	IPI00291792			4				
Receptor Receptor	-	ITGB4 KDELR1	IPI00027422 IPI00028116		35 5	3		5		
Receptor	-	KDELR2	IPI00018248	3		Ī		5		
Receptor Receptor	-	KDELR3 LAMA5	IPI00376991 IPI00641693		1 6					
Receptor	-	LANCL1	IPI00005724		1	- 1				
Receptor Receptor	-	LBR LENG4	IPI00292135 IPI00657706	9	8		1			
Receptor Receptor	-	LEPR LEPROTL1	IPI00472452 IPI00029397	1	2		1	2		
Receptor	-	LGALS3BP	IPI00023673	90			15			
Receptor Receptor		LRP2 MRC1	IPI00024292 IPI00027848		7					
Receptor	-	MS4A1 MYD88	IPI00007880 IPI00001062		3			5		
Receptor Receptor	-	NRP1	IPI00299594		1			6		
Receptor Receptor	-	OLFM4 OPRS1	IPI00022255 IPI00218268		7		2	2		
Receptor	-	PDAP1	IPI00013297	4		3		3		
Receptor Receptor	-	PHB2 PLXNB2	IPI00027252 IPI00398435	62	66	40	27	88		
Receptor	-	PPARBP	IPI00427522	1						
Receptor Receptor		PTGIR PTPRC	IPI00016317 IPI00306325			18		5		
Receptor	-	PTPRF PVRL4	IPI00465186 IPI00043992		3 5					
Receptor Receptor	<u> </u>	RRBP1	IPI00215743		5 62					
Receptor Receptor	-	RTN4RL2 SEC63	IPI00328746 IPI00218922		1	1	6	4		
Receptor	-	SELS	IPI00020468				ь	3		
Receptor Receptor	-	SIT1 SLAMF6	IPI00004407 IPI00101172					1 6		
Receptor	-	SRPR	IPI00385267				1			
Receptor Receptor	-	SRPRB TACSTD2	IPI00295098 IPI00297910	6	3		4	5		
Receptor	-	TFRC	IPI00022462	26	41		7	10		
Receptor Receptor		TGFB1I1 THADA	IPI00011663 IPI00444843	68	9	34	23	53		
Receptor	-	THRAP4 THRAP6	IPI00219430 IPI00063213			2	2			
Receptor Receptor	-	TMED7	IPI00063213 IPI00428967		4		2			

Protoin family	Cubfomily	Dretain name	IDI oco no	Number of spectrum-to-sequence matches					
Protein family	Subfamily	Protein name (Sugen nomenclature for kinases when available, rest from IPI)	IPI acc. no.	HeLa	Placenta	Jurkat	K562	Ramos	
Receptor	-	TNPO3	IPI00455125	17	5	15	14	15	
Receptor Receptor	-	TOMM22 TRAF2	IPI00024976 IPI00292635	58	18	70	56	191	
Receptor Receptor	-	TRAM1 TVB1 HUMAN	IPI00219111 IPI00003986			4		3	
Lipid binding	-	ACBD3	IPI00009315			1		2	
Lipid binding Lipid binding	-	ANXA6 ANXA7	IPI00221226 IPI00514510		15	4			
Lipid binding	-	ANXA11	IPI00414320		14				
Lipid binding Lipid binding	-	AP1G1 AP2A1	IPI00643591 IPI00304577	53	43	3 10	100	42	
Lipid binding	-	AP2A2	IPI00016621 IPI00022256	23	16		44	25	
Lipid binding Lipid binding	-	AP2M1 AP3B1	IPI00022256	21	4	4	48 9	4	
Lipid binding Lipid binding	-	AP3D1 APOL2	IPI00719680 IPI00220007	13	4	1	1	1	
Lipid binding	-	APOL3	IPI00302796	4				2	
Lipid binding Lipid binding	-	CD48 CD59	IPI00013831 IPI00011302		5			4	
Lipid binding	-	CHPT1	IPI00329548		_		3		
Lipid binding Lipid binding	-	CLU EEA1	IPI00400826 IPI00329536		5 17				
Lipid binding	-	FABP4	IPI00215746	7	3	8	12	21	
Lipid binding Lipid binding	-	FABP5 GPAA1	IPI00007797 IPI00021594		9	8	12	21	
Lipid binding Lipid binding	-	HIP1R M11S1	IPI00024417 IPI00402233	8		- 1		52	
Lipid binding Lipid binding	-	NCF1	IPI00402233	3				3	
Lipid binding Lipid binding	-	PGRMC2 PITPNB	IPI00005202 IPI00395939		10		1		
Lipid binding	-	RUFY1	IPI00465429				1		
Lipid binding Lipid binding	-	SCP2 SNX9	IPI00026105 IPI00001883	-	-	4	3	2	
Lipid binding	-	SNX24	IPI00022302				,	2	
Lipid binding Sugar binding	[- -	VCP APCS	IPI00478540 IPI00022391	30	57 2	44	21	36	
Sugar binding	-	BSG	IPI00218019		8			16	
Sugar binding Sugar binding	- -	CD22 CSPG2	IPI00295133 IPI00009802	1	-			1	
Sugar binding	-	LGALS1	IPI00219219	4	2		8	40	
Sugar binding Sugar binding	-	LGALS7 LGALS8	IPI00219221 IPI00215644		1			10	
Sugar binding	-	PRG2	IPI00010341		4				
Sugar binding Sugar binding	-	PRG3 SVEP1	IPI00005778 IPI00301288		1 6				
Sugar binding	- Coloium	VTN	IPI00298971	6	3		2		
Metabolite binding Metabolite binding	Calcium Calcium	CALR CAPS	IPI00020599 IPI00465352	ь	11 6				
Metabolite binding Metabolite binding	Calcium Calcium	CHP HPCAL1	IPI00218924 IPI00219344		5	2	6	9	
Metabolite binding	Calcium	HRNR	IPI00219344 IPI00398625	26	55	23	36	19	
Metabolite binding Metabolite binding	Calcium Calcium	S100A7 S100A8	IPI00328396 IPI00007047	1 6	7		1	5 10	
Metabolite binding	Calcium	S100A9	IPI00027462	7	7		- 4	12	
Metabolite binding Metabolite binding	Calcium Calcium	S100A11 S100A14	IPI00013895 IPI00010214	3	13		5		
Metabolite binding	Calcium	S100A16	IPI00062120	'	3	1			
Metabolite binding Metabolite binding	Calcium Copper	S100P SCO2	IPI00017526 IPI00014458	5	12			6	
Metabolite binding	Metal	FHL1	IPI00055606		8				
Metabolite binding Metabolite binding	Metal Metal	MT1G SELK	IPI00413064 IPI00428100	3	3	1	4		
Metabolite binding	Metal	SELT	IPI00008351					4	
Metabolite binding Metabolite binding	Zinc Zinc	CRIP2 LIMS2	IPI00006034 IPI00398576		6 2				
Metabolite binding Metabolite binding	Zinc Zinc	LIMS3 LPXN	IPI00244212 IPI00299066	47	16	28	11	13 10	
Metabolite binding	Zinc	LUC7L2	IPI00006932	7	2		4	7	
Metabolite binding Metabolite binding	Zinc Zinc	PREI3 PREI3	IPI00386122 IPI00477800			2		3	
Metabolite binding	Zinc	SPIRE1	IPI00171145	3					
Metabolite binding Metabolite binding	Zinc -	ZFYVE26 HEBP1	IPI00470896 IPI00148063	3	24	5	7		
Metabolite binding	-	SCARA5	IPI00399026			Ī		6	
Metabolite binding Vesicle Trafficking	- ER / Golgi	SEC14L1 COG3	IPI00021887 IPI00414858					5	
Vesicle Trafficking Vesicle Trafficking	ER / Golgi	COG6	IPI00642611 IPI00140201			5			
Vesicle Trafficking	ER / Golgi ER / Golgi	COG8 COPG	IPI00140201		4			В	
Vesicle Trafficking Vesicle Trafficking	ER / Golgi ER / Golgi	DAB2 LRMP	IPI00179438 IPI00006158		22			24	
Vesicle Trafficking	ER / Golgi	RER1	IPI00005728		10			6	
Vesicle Trafficking Vesicle Trafficking	ER / Golgi ER / Golgi	RER1 SCAMP2	IPI00549335 IPI00218850	2	1	3			
Vesicle Trafficking	ER / Golgi	SCAMP3	IPI00306382	2	·				
Vesicle Trafficking Vesicle Trafficking	ER / Golgi ER / Golgi	SCAMP4 SCFD1	IPI00056310 IPI00479223	3	1 3		2		
Vesicle Trafficking	ER / Golgi	SEC15L2	IPI00294133	Ŭ	2				
Vesicle Trafficking Vesicle Trafficking	ER / Golgi ER / Golgi	SEC31L1 SSR1	IPI00515103 IPI00301021		6			3	
Vesicle Trafficking	ER / Golgi	SSR4	IPI00647461	3	9		4	9	
Vesicle Trafficking Vesicle Trafficking	ER / Golgi ER / Golgi	TMED2 TMED9	IPI00016608 IPI00023542		5 4		1 2	2	
Vesicle Trafficking	ER / Golgi	TMED10	IPI00028055		5	3	1	3	
Vesicle Trafficking Vesicle Trafficking	ER / Golgi ER / Golgi	TRAPPC6A TRAPPC6B	IPI00012211 IPI00384047				1	1	
Vesicle Trafficking Vesicle Trafficking	ER / Golgi ER / Golgi	VAMP2 VAMP5	IPI00477183 IPI00293756	1		3		9	
Vesicle Trafficking	ER / Golgi	VAMP8	IPI00030911	9	5			5	
Vesicle Trafficking Vesicle Trafficking	ER / Golgi ER / Golgi	VAPA VAPB	IPI00374657 IPI00006211	1	4		2	-	
Vesicle Trafficking	ER / Golgi	VPS13C	IPI00465428		·	17		19	
Vesicle Trafficking Vesicle Trafficking	ER / Golgi ER / Golgi	VPS18 VPS29	IPI00001985 IPI00184284		3				
Vesicle Trafficking	ER / Golgi	VPS33A	IPI00073179		1			2	
Vesicle Trafficking Vesicle Trafficking	ER / Golgi ER / Golgi	VPS37B WDR48	IPI00002926 IPI00658210	9		2		3	
Unknown		67 KDA PROTEIN.	IPI00640857	1			3	2	
Unknown Unknown	- -	75KDA PROTEIN. 90 KDA PROTEIN.	IPI00052996 IPI00479092	1				1	
	1	per • renn	100 17 3002						

Drotein famil	0.16	2		. Number of spectrum-to-sequence matches					
Protein family	Subfamily	Protein name (Sugen nomenclature for kinases when available, rest from IPI)	IPI acc. no.	Numb HeLa			quence m K562		
Unknown	-	AAAS	IPI00024143	пеца	riacenta	Jurkat 8	N302	Ramos	
Unknown	-	ABC1 AFF2	IPI00464999 IPI00020903				2	23	
Unknown Unknown	-	AMMECR1	IPI00022258					3	
Unknown Unknown	-	ARMET Ataxin-10	IPI00328748 IPI00642301		7	5	1	4	
Unknown	-	AUP1	IPI00001891					4	
Unknown Unknown	-	AYP1 BAIAP2L1	IPI00382985 IPI00179326	1		1			
Unknown	-	BBC3	IPI00044436					1	
Unknown Unknown	-	BC002942 BOLA2	IPI00385495 IPI00301434	6	2		4	4	
Unknown Unknown	- -	BRAIN MY047 PROTEIN. BRD4-NUT FUSION ONCOPROTEIN.	IPI00029397 IPI00465212	1	1	2 25	5	4	
Unknown	-	BRI3BP	IPI00103599		·	3	3	14	
Unknown Unknown	- -	BRRN1 C1orf35	IPI00299507 IPI00293746	2			1	<u>2</u>	
Unknown	-	C1orf45	IPI00514908	3	12		12	2	
Unknown Unknown	- -	C1orf68 C1orf112	IPI00023078 IPI00178512	4	3	3	3	1	
Unknown Unknown	-	C1orf128 C2orf18	IPI00015351 IPI00550440		3	2	6	6	
Unknown	-	C2orf18	IPI00643625		4	2	2		
Unknown Unknown	-	C2orf28 C2orf30	IPI00412376 IPI00549597		1			1	
Unknown	-	C3orf10	IPI00000296		·			2	
Unknown Unknown	- -	C3orf37 C3orf60	IPI00024618 IPI00399053	3			3	3	
Unknown	-	C4orf9	IPI00022613			5	J	J	
Unknown Unknown	- -	C6orf1 C6orf60	IPI00328453 IPI00413868	3				1	
Unknown	-	C6orf66	IPI00023064				3	6	
Unknown Unknown	- -	C6orf111 C6orf129	IPI00165995 IPI00513945	-	-	2	2	1 3	
Unknown	-	C6orf167	IPI00394816		_	8			
Unknown Unknown	- -	C7orf24 C7orf27	IPI00031564 IPI00658145	6	5	9	5 10	10 7	
Unknown	-	C8orf30A	IPI00009335					1	
Unknown Unknown	- -	C8orf41 C8orf55	IPI00306207 IPI00171421		2	10	2	3	
Unknown	-	C9orf5	IPI00607576		2	1		1	
Unknown Unknown	-	C9orf40 C9orf46	IPI00017504 IPI00307547		4	2		1	
Unknown	-	C9orf77 C9orf88	IPI00643071 IPI00456750		17	3			
Unknown Unknown	-	C9orf114	IPI00418229		17	1			
Unknown Unknown	- -	C10orf57 C10orf64	IPI00290807 IPI00175026		1			25	
Unknown	-	C10orf64	IPI00646942					76	
Unknown Unknown	- -	C10orf70 C10orf104	IPI00020510 IPI00060893	<u>6</u>		3	2	2	
Unknown	-	C10orf119	IPI00478758			J		1	
Unknown Unknown	-	C10orf137 C11orf51	IPI00183424 IPI00022312					1	
Unknown	-	C11orf52	IPI00059185		4				
Unknown Unknown	-	C12orf34 C13orf1	IPI00180066 IPI00030959			8		1	
Unknown	-	C14orf125	IPI00329192	9					
Unknown Unknown	-	C14orf129 C14orf166	IPI00009374 IPI00006980				5	7	
Unknown	-	C14orf173	IPI00008339	5			40	45	
Unknown Unknown	- -	C17orf63 C18orf19	IPI00291010 IPI00290799	17		50	49	15 4	
Unknown	-	C18orf24 C18orf25	IPI00059912 IPI00059687	- 1				2	
Unknown Unknown	-	C18orf45	IPI00645638	1				2	
Unknown Unknown	-	C18orf55 C19orf28	IPI00306439 IPI00166640	2			1		
Unknown	-	C20orf43	IPI00297121	5				6	
Unknown Unknown	<u>-</u>	C20orf52 C20orf80	IPI00016046 IPI00334710	2				2	
Unknown	-	C21orf33	IPI00024913	1		2	6	1	
Unknown Unknown	-	C21orf70 C21orf124	IPI00027898 IPI00642485	12				36	
Unknown	-	C22orf18	IPI00031566					4	
Unknown Unknown	<u>- </u>	CCDC6 CCDC43	IPI00000634 IPI00329147	3		<u> </u>		1	
Unknown	-	CCDC44	IPI00019903	2			_		
Unknown Unknown	-	CCDC56 CCDC58	IPI00022277 IPI00046828				2		
Unknown Unknown	- -	CCDC59 CCDC69	IPI00329594 IPI00410093	1		1	1	4	
Unknown	-	CCL28	IPI00221002					2	
Unknown Unknown	- -	CD81 CDKAL1	IPI00657752 IPI00015713					1	
Unknown	-	CGI-38	IPI00306413		25				
Unknown Unknown	- -	CHAC2 CHCHD1	IPI00103047 IPI00060107	2				2	
Unknown	-	CHCHD4	IPI00177428				1		
Unknown Unknown	- -	CHMP4B CKAP2	IPI00025974 IPI00071824					3	
Unknown	-	CLN6	IPI00016597	3				3	
Unknown Unknown	<u>- </u>	CLNS1A COBLL1	IPI00004795 IPI00007133	3	28	<u> </u>		<u> </u>	
Unknown	-	COL1A1 COMMD4	IPI00297646		2			_	
Unknown Unknown	-	COMMD9	IPI00413500 IPI00305212					2	
Unknown Unknown	-	COQ7 COX4NB	IPI00294073 IPI00005740		1		3		
Unknown	-	CRR9	IPI00151358					1	
Unknown Unknown	- -	CTDP1 CXorf15	IPI00647363 IPI00019994	1 3	-	-		2	
Unknown	-	CXorf56	IPI00335006	1					
Unknown Unknown	- -	CYB5B DCUN1D5	IPI00303954 IPI00165361	1			1		
Unknown	-	DKFZp586C1924	IPI00031064	 	2		3	6	
	I-	DKFZp667B1218	IPI00174390	8			2	10	
Unknown Unknown	-		IPI00397883	52	10		a	1	
Unknown Unknown Unknown Unknown	-	DKFZp686K16132 DOPEY2 DREV1	IPI00397883 IPI00294653 IPI00100239	52	19		9	1 6	

Destain for "	1		T.=-	Number of spectrum-to-sequence matches					
Protein family	Subfamily	Protein name (Sugen nomenclature for kinases when available, rest from IPI)	IPI acc. no.	Numb HeLa	er of spec Placenta	trum-to-se Jurkat	quence m K562		
Unknown	-	DSCR2	IPI00030770	пеца	riacenta	Jurkat	1	Ramos	
Unknown	-	DYM E2IG5 PROTEIN.	IPI00296211			2		6	
Unknown Unknown	-	EAF1	IPI00554692 IPI00328258					1	
Unknown Unknown	-	EAF2 EFHD1	IPI00093988 IPI00031091		2			6	
Unknown	-	EFHD2	IPI00060181		2		1		
Unknown Unknown	- -	EI24 ELOVL1	IPI00023185 IPI00010187	1			2	3	
Unknown	-	EPDR1	IPI00657648	33		108			
Unknown Unknown	-	EXOC1 EXOC4	IPI00019427 IPI00059279		1 2	1			
Unknown Unknown	-	F11R FADS1	IPI00001754 IPI00385842		2		1		
Unknown	-	FAM32A	IPI00022402			3		5	
Unknown Unknown	-	FAM33A FAM36A	IPI00103149 IPI00103057	2	2	2	3	2 6	
Unknown	-	FAM49A	IPI00006574		3				
Unknown Unknown	-	FAM49B FAM58A	IPI00303318 IPI00395371	6		8	3	10	
Unknown Unknown	-	FAM62A FAM62B	IPI00022143 IPI00409635	4	1	13	10	10	
Unknown	-	FAM83A	IPI00328846	5			152		
Unknown Unknown	-	FAM96B FAM98A	IPI00007024 IPI00174442	2	4	2	2	7	
Unknown	-	FAM105B	IPI00101734					1	
Unknown Unknown	-	FGR1L3 FGFR1OP2	IPI00021048 IPI00014903		19	6		2	
Unknown	-	FKSG24	IPI00186732			Ů		2	
Unknown Unknown	- -	FLJ10808	IPI00060574 IPI00023647			6	7	11	
Unknown	-	FLJ12688	IPI00034201			ı .		1	
Unknown Unknown	<u>-</u>	FLJ13910 FLJ14346	IPI00009707 IPI00410094			<u> </u>	1	3	
Unknown	-	FLJ14803 FLJ20272	IPI00045764 IPI00183938	-			-	10	
Unknown Unknown	-	FLJ20397	IPI00242630	4		2	3	3	
Unknown Unknown	-	FLJ20625 FLJ20699	IPI00016670 IPI00550644		1		2	12	
Unknown	-	FLJ22555	IPI00291751		4	3	4	5	
Unknown Unknown	-	FLJ34931 FLJ36004	IPI00397879 IPI00167858	1				2	
Unknown	-	FLJ46072	IPI00394829	·			22		
Unknown Unknown	-	FLOTILLIN 1. FRMD6	IPI00514818 IPI00043622			1	1		
Unknown	-	FRYL	IPI00159652.			9	-	20	
Unknown Unknown	-	GALGT PROTEIN. GBAS	IPI00384413 IPI00016077	3			3		
Unknown Unknown	-	GCET2 GDF1	IPI00167003 IPI00019462	1				2	
Unknown	-	GHITM	IPI00023567	'			2	6	
Unknown Unknown	-	GOLGA3 GOLGA7	IPI00305267 IPI00395534	4					
Unknown	-	GOLGA7	IPI00480022	·	2	5		9	
Unknown Unknown	-	GOLT1B GPSN2	IPI00007061 IPI00644037	8	29	18		14	
Unknown	-	GRAMD1A	IPI00180434	51		170	206	129	
Unknown Unknown	-	GRAMD1B GRAMD1C	IPI00008177 IPI00217850	9					
Unknown	-	GRAMD3	IPI00305868	3				,	
Unknown Unknown	-	GTL3 HBLD1	IPI00001655 IPI00376195			2			
Unknown	-	hCAP-D3 HCAP-G	IPI00000899 IPI00106495	4		7		3 12	
Unknown Unknown	-	HDDC2	IPI00386751				1	12	
Unknown Unknown	-	HDGF2 HERV-FRD	IPI00013290 IPI00398064		4	3	1	4	
Unknown	-	hfl-B5	IPI00000495		·		2	7	
Unknown Unknown	-	HIGD1A HPS6	IPI00176824 IPI00015505	3	1	2	2	1	
Unknown	-	HSPC117	IPI00550689	2	2	5	2		
Unknown Unknown	-	HSPC138 HYPOTHETICAL PROTEIN DKFZP686E23209.	IPI00021637 IPI00470798		4		1		
Unknown Unknown	-	HYPOTHETICAL PROTEIN FLJ46024. HYPOTHETICAL PROTEIN XP_051477.	IPI00444177 IPI00385962		1 2				
Unknown	-	HYPOTHETICAL PROTEIN XP_066073.	IPI00044536					1	
Unknown Unknown	-	HYPOTHETICAL PROTEIN XP_067264. HYPOTHETICAL PROTEIN XP_067436.	IPI00056251 IPI00056985	-	1	-		1	
Unknown	-	HYPOTHETICAL PROTEIN XP_067755.	IPI00058119			2		<u>'</u>	
Unknown Unknown	- 	HYPOTHETICAL PROTEIN XP_067988. HYPOTHETICAL PROTEIN XP_070964.	IPI00058956 IPI00053204	5	1			1	
Unknown	-	HYPOTHETICAL PROTEIN XP_074598.	IPI00056710 IPI00051491					1	
Unknown Unknown	-	HYPOTHETICAL PROTEIN XP_077601. HYPOTHETICAL PROTEIN XP_089118.	IPI00077192	1				1	
Unknown Unknown	- -	HYPOTHETICAL PROTEIN XP_089347. HYPOTHETICAL PROTEIN XP_090110.	IPI00102791 IPI00090052				5		
Unknown	-	HYPOTHETICAL PROTEIN XP_091115.	IPI00080641	1			- '		
Unknown Unknown	-	HYPOTHETICAL PROTEIN XP_092572. HYPOTHETICAL PROTEIN XP_093117.	IPI00094646 IPI00083315	5	3	-		-	
Unknown	-	HYPOTHETICAL PROTEIN XP_093525.	IPI00084638	4	_ ď				
Unknown Unknown	- -	HYPOTHETICAL PROTEIN XP_094022. HYPOTHETICAL PROTEIN XP_094185.	IPI00095488 IPI00096060				1	1	
Unknown	-	HYPOTHETICAL PROTEIN XP_094427.	IPI00097031					1	
Unknown Unknown		HYPOTHETICAL PROTEIN XP_095377. HYPOTHETICAL PROTEIN XP_095701.	IPI00086787 IPI00088092		1			1	
Unknown	-	HYPOTHETICAL PROTEIN XP_096748. HYPOTHETICAL PROTEIN XP_099313.	IPI00078833 IPI00092745		1			1	
Unknown Unknown	-	HYPOTHETICAL PROTEIN XP_103875.	IPI00083209	1	1			1	
Unknown Unknown	- -	HYPOTHETICAL PROTEIN XP_104170. HYPOTHETICAL PROTEIN XP_108488.	IPI00093000 IPI00077790	1				5	
Unknown	-	HYPOTHETICAL PROTEIN XP_120423.	IPI00150581		1				
Unknown Unknown	- -	HYPOTHETICAL PROTEIN XP_120656. HYPOTHETICAL PROTEIN XP_120711.	IPI00151048 IPI00151187				1	1	
Unknown	-	HYPOTHETICAL PROTEIN XP_121796.	IPI00146153				1	<u> </u>	
Unknown Unknown	[- -	HYPOTHETICAL PROTEIN XP_298883. HYPOTHETICAL PROTEIN XP_299754.	IPI00259288 IPI00245792	-	-	-	2	1 1	
Unknown	-	HYPOTHETICAL PROTEIN XP_303855.	IPI00260484			1		<u>'</u>	
	I-	HYPOTHETICAL PROTEIN XP_304252.	IPI00244572	1	1	ı	1 1	. 2	
Unknown Unknown	-	HYPOTHETICAL PROTEIN XP_353184.	IPI00374663	2					

Protein family	Subfamily	Protein name (Sugen nomenclature for kinases when available, rest from IPI) HYPOTHETICAL PROTEIN.	IPI acc. no.				equence m		
				HeLa	Placenta	Jurkat	K562	Ramos	
Inknown -		IPI00005505.1	IPI00719079 IPI00005505	1	2			 	
nknown -		IPI00040071.1	IPI00040071		3				
nknown - nknown -		IPI00068275.1 IPI00075282.1	IPI00068275 IPI00075282	5			1	 	
nknown -		IPI00098658.4	IPI00098658	2					
nknown - nknown -		IPI00100064.1 IPI00104877.1	IPI00100064 IPI00104877	3		1	!	-	
nknown -		IPI00150225.1	IPI00150225	1					
Jnknown - Jnknown -		IPI00154147.1 IPI00157357.1	IPI00154147 IPI00157357	5			2	 	
Inknown -		IPI00179072.1	IPI00179072				5		
Inknown -		IPI00180955.1 IPI00221136.3	IPI00180955 IPI00221136						
Jnknown -		IPI00333081.1	IPI00333081	3	3		3		
Jnknown - Jnknown -		IPI00333348.1 IPI00335775.1	IPI00333348 IPI00335775	1		5	<u> </u>		
Jnknown -		IPI00396487.1	IPI00396487		1		1		
Inknown -		IPI00411598.1 IPI00413331.1	IPI00411598 IPI00413331		1				
nknown -		IPI00413331.1 IPI00414413.1	IPI00413331	11		'			
nknown -		IQCC JAGN1	IPI00018690 IPI00329025						
Inknown -		KIAA0101	IPI00329025						
Inknown -		KIAA0103	IPI00014149		4				
Inknown -		KIAA0133 KIAA0152	IPI00028980 IPI00029046	3	4	27		-	
nknown -		KIAA0196	IPI00029175						
Inknown -		KIAA0261 KIAA0310	IPI00412441 IPI00641384	30		64	62	,—	
lnknown -		KIAA0368	IPI00157790	37			2		
Inknown -		KIAA0372 KIAA0404	IPI00005634 IPI00304926	_			1		
nknown -		KIAA0406	IPI00011702			10			
Inknown -		KIAA0528 KIAA0683	IPI00465142 IPI00016868	102	45	366	88		
nknown -		KIAA0690	IPI00101186	1			1	匸	
Inknown -		KIAA0746 KIAA0802	IPI00470809 IPI00411635				H	\vdash	
nknown -		KIAA0922	IPI00021671			<u> </u>	<u> </u>		
nknown -		KIAA0963 KIAA0999	IPI00024900						
Inknown -		KIAA1033	IPI00440492 IPI00298991	1			1		
nknown -		KIAA1414	IPI00479069						
nknown - nknown -		KIAA1430 KIAA1524	IPI00075805 IPI00154283	8					
nknown -		KIAA1618	IPI00242962	8		86			
nknown - nknown -		KIAA1632 KIAA1715	IPI00400765 IPI00028369	4		10	7	 	
nknown -		KIAA1787	IPI00064219	1					
nknown -		KIAA1794 KIAA1797	IPI00477345 IPI00383607	68 9		40		 	
nknown -		KIAA1833	IPI00376747	4	7	The state of the s			
Inknown -		KIAA1840 KIAA1967	IPI00101923 IPI00182757			4		-	
Jnknown -		KIAA2010	IPI00217013	25	10	50			
Inknown -		KTN1 LAMP2	IPI00328753 IPI00216172		1		2	 	
Inknown -		LANCL3	IPI00643639		'		1		
Inknown -		LAS1L LETM1	IPI00641990 IPI00017592	2					
nknown -		LGP1	IPI00017592 IPI00427501	1					
nknown - nknown -		LIMD2 LOC51035	IPI00549972 IPI00396563	5			6	\vdash	
nknown -		LOC90580	IPI00396363	6	3	6			
nknown -		LOC92345	IPI00063219	1					
nknown - nknown -		LOC116143 LOC128977	IPI00465211 IPI00418459				1		
nknown -		LOC129138	IPI00025746				27		
nknown - nknown -		LOC146206 PROTEIN. LOC203547	IPI00384567 IPI00334343						
nknown -		LOC255326	IPI00457009						
nknown - nknown -		LOC283377 LOC284106	IPI00291643 IPI00401947			6		 	
nknown -		LOC339766	IPI00216817						
nknown - nknown -		LOC388015 LOC388568	IPI00375947 IPI00398588		17				
nknown -		LOC391352	IPI00397191		1	ŕ	1		
nknown - nknown -		LOC391722 LOC392758	IPI00376572 IPI00375167			<u> </u>	1	₩	
nknown -		LOC401531	IPI00401259						
nknown -		LOC441454 LOC441899	IPI00454810 IPI00457324				l	 	
nknown - nknown -		LOC493856	IPI00166865					匸	
nknown -		LOC494150 PROTEIN. LRBA	IPI00386435 IPI00002255			3	4		
nknown - nknown -		LSM12	IPI00410324			2	2 2		
nknown -		LYSMD2	IPI00216874			2	1		
nknown - nknown -		M6PRBP1 MAC30	IPI00303882 IPI00020004		4		-	 	
nknown -		MAD1L1	IPI00470519				7		
nknown - nknown -		MAEA MAGED1	IPI00607605 IPI00398845			4	1	 	
nknown -		MAPBPIP	IPI00477441			1			
nknown - nknown -		MESDC2 MFSD1	IPI00399089 IPI00152959	1	3			 	
nknown -		MFSD5	IPI00301554						
nknown -		MGC2803	IPI00031526	ļ .		4	<u> </u>	 	
nknown - nknown -		MGC10993 MGC13096	IPI00012251 IPI00031647	1		 	 	 	
nknown -		MGC14289	IPI00062866		2	6	1		
nknown - nknown -		MGC33214 MGC52424	IPI00181160 IPI00177509	-	-	1	1	 	
nknown -		MGC61571	IPI00376478	1		2	2 2		
nknown - nknown -		MGP Mitsugumin 23	IPI00028714 IPI00031697		1	ļ <u> </u>		,—	
nknown - nknown -		MLC1SA	IPI00027255		4		2		
nknown -	-	MLLT3	IPI00000033	4					
nknown -		MLSTD2 MORF4L1	IPI00478838 IPI00409675	2	l	-	!		

Destrict to sell a	0.16	Destain agent	IDI	Number of spectrum-to-sequence match				
Protein family	Subfamily	Protein name (Sugen nomenclature for kinases when available, rest from IPI)	IPI acc. no.	HeLa	Placenta	Jurkat	K562	Ramos
Unknown	-	MOSC2	IPI00329552	2	riacoma	ournat	11002	ramoo
Unknown Unknown	-	MPDU1 MR-1	IPI00025292 IPI00382557	2	5	1 2	2	2
Unknown	-	MRPL46	IPI00023161	4	·		_	
Unknown Unknown	-	MRPL53 MRPS26	IPI00061531 IPI00006606	2			1	
Unknown	-	MTP18	IPI00383766					2
Unknown Unknown	- -	MVP NBEAL2	IPI00000105 IPI00297242	3		9	3	
Unknown Unknown	-	NCDN NDRG1	IPI00549543 IPI00022078	2	1			1
Unknown	-	NIFUN	IPI00022240		1		4	
Unknown Unknown	- -	NIPSNAP1 NOL9	IPI00304435 IPI00002902				2	3
Unknown	-	NRM	IPI00217557			1		J
Unknown Unknown	-	NSUN2 NUDC	IPI00306369 IPI00550746	8			7	7
Unknown	-	NUDCD1	IPI00306398	2		3	1	3
Unknown Unknown	- -	NUDCD2 NUDT16L1	IPI00103142 IPI00031650		7	9	7	13
Unknown Unknown	-	NYREN18 OCIAD2	IPI00377271 IPI00555902	1		5		2
Unknown	-	ODZ3	IPI00333902		4	Ü		3
Unknown Unknown	-	ORF1-FL49 OSBP	IPI00382821 IPI00024971	3	1	1		
Unknown	-	PACAP	IPI00024971	3	1			3
Unknown Unknown	-	PACSIN2 PAGE4	IPI00027009 IPI00299244		1 4			
Unknown	-	PAPD1	IPI00470416					4
Unknown Unknown	- -	PDCD10 PDCL2	IPI00298558 IPI00166688	1	4		2	5
Unknown	-	PHLDA2	IPI00019551		2			1
Unknown Unknown	-	PHLDB2 PNPLA1	IPI00410259 IPI00167613					1
Unknown	-	POPDC2	IPI00328717				1	4
Unknown Unknown	-	PP3971. PQLC3	IPI00170670 IPI00167098		2			1
Unknown	-	PREDICTED: SIMILAR TO GOLGI AUTOANTIGEN, GOLGIN S	IPI00399155		_	2		
Unknown Unknown	-	PROSC PSG1	IPI00016346 IPI00163720	2	8	15	7	8
Unknown	-	PSG9	IPI00293461		4			
Unknown Unknown	-	PTMA PTMS	IPI00015550 IPI00719158	16	7		5	19
Unknown	-	PXMP4	IPI00218925		4			2
Unknown Unknown	- -	RAFTLIN RAG1AP1	IPI00032395 IPI00305185					26
Unknown	-	RHBDF1	IPI00290292		1			
Unknown Unknown	-	RHBDL6 RHBDL7	IPI00433499 IPI00010255					3
Unknown	-	RP1-14N1 3	IPI00397801	12	20	9	23	9
Unknown Unknown	-	RP5-1104E15 5 RP11-98F14 6	IPI00300223 IPI00100313				1	5
Unknown	-	RP11-217H1 1	IPI00301202		5			J
Unknown Unknown	-	RQCD1 RTN2	IPI00023101 IPI00024983			6	1	4
Unknown	-	RTN3	IPI00398795		6	1		
Unknown Unknown	-	RTN3 RTTN	IPI00555783 IPI00645947	9		7	3	3
Unknown	-	SAAL1	IPI00304935	1		1	1	1
Unknown Unknown	- -	SAMM50 SART1	IPI00412713 IPI00021417		4	3		
Unknown	-	SBSN	IPI00373937	1				
Unknown Unknown	- -	SF3B5 SFRS16	IPI00010404 IPI00013107				2	1
Unknown Unknown	-	SFT2D2 SH2BP1	IPI00029002 IPI00005625					1
Unknown	-	SIKE	IPI00005625				1	1
Unknown Unknown	-	SIMILAR TO BX34-P1. SIMILAR TO CHROMOSOME 21 OPEN READING FRAME 70.	IPI00063142 IPI00067466					1
Unknown	-	SIMILAR TO CONTOURSOME 21 OPEN READING PRAWE 70.	IPI00067466			1		'
Unknown	-	SIMILAR TO DJ604K5.1 (15 KDA SELENOPROTEIN). SIMILAR TO E2F TRANSCRIPTION FACTOR -LIKE PROTEIN	IPI00104903 IPI00183869				1	2
Unknown Unknown	-	SIMILAR TO FRG1 PROTEIN (FSHD REGION GENE 1 PROTE	IPI00019816				3	2
Unknown Unknown	- -	SIMILAR TO HYPOTHETICAL PROTEIN (H. SAPIENS). SIMILAR TO HYPOTHETICAL PROTEIN FLJ10292.	IPI00036670 IPI00004316				1	4
Unknown	-	SIMILAR TO HYPOTHETICAL PROTEIN FLJ10902 (H. SAPI	IPI00043770	'			1	1
Unknown Unknown	- -	SIMILAR TO HYPOTHETICAL PROTEIN FLJ12457. SIMILAR TO HYPOTHETICAL PROTEIN MGC29729.	IPI00076139 IPI00047508	1	2	2	3	2
Unknown	-	SIMILAR TO KARYOPHERIN ALPHA 1 (IMPORTIN ALPHA 5)	IPI00097143	2			,	
Unknown Unknown	- -	SIMILAR TO NONSYNDROMIC HEARING IMPAIRMENT PROTEI SIMILAR TO PEPTIDYLPROLYL ISOMERASE A (CYCLOPHILI	IPI00106625 IPI00094886			1	1	
Unknown	-	SIMILAR TO PESCADILLO HOMOLOG 1.	IPI00074223					1
Unknown Unknown	- -	SIMILAR TO PROLINE-SERINE-THREONINE PHOSPHATASE I SIMILAR TO R27-2 PROTEIN - TRYPANOSOMA CRUZI.	IPI00141076 IPI00161341	1				5
Unknown	-	SIMILAR TO RETICULON PROTEIN 3 (NEUROENDOCRINE-SP	IPI00177423			3		
Unknown Unknown	<u>-</u>	SIMILAR TO SERINE/THREONINE-PROTEIN KINASE PAK 2 SIMILAR TO STEROID HORMONE RECEPTOR HOMOLOG - FRU	IPI00158354 IPI00096097			1	1	1
Unknown	-	SIMILAR TO TANDEM PORE DOMAIN POTASSIUM CHANNEL T	IPI00041219	2				1
Unknown Unknown		SPBC24	IPI00218097 IPI00168317	2		2		
Unknown Unknown	-	SPBC25 SSNA1	IPI00010219 IPI00014437			1		
Unknown		SSU72	IPI00023556			1		4
Unknown Unknown	-	STARD7 STATIP1	IPI00024548 IPI00015560				2	3
Unknown	-	STOM	IPI00219682	6	8		2	1
Unknown Unknown	- -	STRA6 STRAP	IPI00465247 IPI00294536		4			2
Unknown	-	STXBP6	IPI00178314					1
Unknown Unknown	- -	SUGT1 SURF4	IPI00009149 IPI00005737	15	80	37	12	3 36
Unknown	-	SYNGR2	IPI00013946	15	3		12	36
Unknown Unknown	- -	SYNGR2 SYNGR3	IPI00654744 IPI00013947		-	2	-	2
Unknown	-	TBL2	IPI00000948					4
Unknown Unknown	- -	TCOF1 TEX264	IPI00298696 IPI00006372	25 6	2	7	26	30 19
Unknown	-	THUMPD1	IPI00465054			-	1	19
Unknown Unknown	-	TIPRL TMCO1	IPI00180637 IPI00026111			3	3	2
UIIKIIUWII	I ^E	TINICOT	II-1000Z0111		l	4		3

Protein family	Subfamily	Protein name (Sugen nomenclature for kinases when available, rest from IPI)	IPI acc. no.	Number of spectrum-to-sequence matches					
				HeLa	Placenta	Jurkat	K562	Ramos	
Unknown -		TMEM2	IPI00170706		13	3			
Unknown -		TMEM16F	IPI00151710		3	5			
Unknown -		TMEM32	IPI00166785		2	3			
Unknown -		TMEM33	IPI00299084	11	13	12	4	1 14	
Unknown -		TMEM38B	IPI00018237				1		
Unknown -		TMEM41A	IPI00063334					1	
Unknown -		TMEM41B	IPI00555703	3			1		
Unknown -		TMEM43	IPI00301280		14	ı			
Unknown -		TMEM49	IPI00062469					1	
Unknown -		TMEM50A	IPI00385141						
Unknown -		TMEM50B	IPI00010146						
Unknown -		TMEM66	IPI00604763	13		5	2	2	
Unknown -		TMEM103	IPI00107155				1	i e	
Unknown -		TMEM111	IPI00020472			1		1	
Unknown -		TMEM113	IPI00152695	2					
Unknown -		TMPIT	IPI00470533	2	3	3 2		1	
Unknown -		TNFAIP8	IPI00027627			3		1 :	
Unknown -		TPARL	IPI00307572	2	2	1		1 :	
Unknown -		TRAM2	IPI00014218		1			1	
Unknown -		TRAPPC1	IPI00009654					1 :	
Unknown -		TSC1	IPI00022043					1 .	
Unknown -		TSPAN14	IPI00303059		2	1		1	
Unknown -		TTC7B	IPI00456534		4	ı		1	
Unknown -		UBL5	IPI00013241					1 .	
Unknown -		UBXD2	IPI00293946						
Unknown -		UFC1	IPI00294495					1 :	
Unknown -		UNC45A	IPI00072534	8		2	3	3	
Unknown -		UNC93B1	IPI00008490					1 .	
Unknown -		UNG2	IPI00186099	1				1	
Unknown -		UNQ501	IPI00063130					1	
Unknown -		UNQ5783	IPI00478640					1	
Unknown -		USMG5	IPI00640630					† :	
Unknown -		VAC14	IPI00025160				6	3	
Unknown -		VCY	IPI00297427		1			†	
Unknown -		WBSCR19	IPI00477590		2	,		†	
Unknown -		WDR18	IPI00032533						
Unknown -		WDR42A	IPI00290071	1		2		†	
Unknown -		WDR58	IPI00328985			_		1	
Unknown -		WDR61	IPI00019269				1	.	
Unknown -		WDR62	IPI00470483					1	
Unknown -		WIBG	IPI00305092				1	it in the second	
Unknown -		WRB	IPI00010873						
Unknown -		XX-FW81657B9 4	IPI00032314					,	
Unknown -		YIF1A	IPI00658171	3	- 2	·	<u> </u>	1 :	
Unknown -		YIF1B	IPI00063544	1	2				
Unknown -		YIPF4	IPI000331127	· '	†	1			
Unknown -		YIPF5	IPI00607768		2	2	<u> </u>		
Unknown -		YPEL5	IPI00429538			1 -			
Unknown -		YRDC	IPI00384180			1	-		
Unknown -		YTHDF2	IPI00306043	2	1	1	1	1	

Abbreviations: SSM; number of spectrum-to-sequence matches, NA; not available.

							bosutin	nib							dasat	inib								imatinib			
IPI acc. no.	Protein	Kinase	highest	highest	highest SSM k	inobeads binding	relative to v	ehicle at		[cpd] causing 50% binding	[cpd] at	highest SSM used for	ki	nobeads bin	ding relative	to vehicle a	at		[cpd] causing 50% binding	[cpd] at inflection	highest SSM used for		kinobead	s binding relative to vehic	cle at	[cpd] causing 50% binding	irillection
II I doc. no.	1 TOTOLIT	Killase	score	SSM	quantification 0.0001 0.001 uM	0.01 0.033 uM uM			1.0 10 uM uM	reduction (uM)	of curve (uM)	quantification 0.0001	0.001 uM	0.01 0.0 uM u		0.33 uM	1.0 uM	10 uM	reduction (uM)	point of curve (uM)	quantification	0.01 uM	0.033 uM		1.0 10 uM uM	reduction (uM)	(uM)
IPI00012197 IPI00298977	XTP3TPA AAK1	AAK1	235 118		4 0.92 1.03 36 0.90 0.97	0.86 0.87 1.07 1.00	0.88	0.90 0	0.69 0.51 0.91 0.55	>10 >10	0.933 3.411	6 0.88 34 0.95	1.02	0.81 0. 1.02 0.	52 0.89 90 1.02	1.04 0.96	0.55	0.67	>10 >10	0.202 NA	2 21	0.87 1.06	1.56	0.91 0.91 0 0.96 0.91 0	0.82 0.80 0.94 0.83		NA NA
IPI00063827 IPI00329488	ABHD14B	ARG	2998	7 2	1 1.10 1.30	0.64 NA 0.90 0.68	NA	NA	NA NA	>10	NA 0.071			0.69 N	IA NA	NA 0.25		NA	>10	NA 0.019	1 53	1.10	NA 1.17	1.15 NA (0.65 NA 0.47 0.30		NA 0.272
IPI00020226	ACOX3 ACTA2	7410	134	4 62	42 1.02 1.01	1.07 1.04 0.99 1.08	1.07	1.04 (0.92 0.78	>10 0.257	NA 0.205		0.97	0.99 0.	92 0.99	1.34 NA		0.83	>10	NA NA	27	1.03 NA	1.02 NA	1.01 0.92 0	0.87 0.76 NA NA	>10	NA NA
IPI00021439	ACTG1		122	1 104	39 1.37 1.16	1.04 1.03	1.01) 69 (63 0.48	>10	0.267	40 1.10	0.96	0.96 0.	92 0.90	0.85	0.59	0.53	>10	0.436	28	1.02	1.23	1.10 0.95 0	0.75	>10	NA
IPI00029219	ACTN4 ACVR1	ALK2	544	4 35	0 NA NA 11 0.91 1.01	NA NA 1.02 1.04	1.10 (NA 0.94 (NA NA 0.96 0.72	>10 >10	NA NA	10 0.99	NA 0.94	0.75 0. 0.91 0.	91 0.95		0.62 0.74	0.69	>10 >10	NA NA	10	NA 0.98	NA 1.18	0.96 0.97 0	NA NA 0.92 0.78		NA NA
IPI00437565	ACVR1B ACVR2B	ALK4 ACTR2B	23l 28l	2 14	2 0.94 1.09 8 0.98 1.22	1.14 NA 1.09 1.18	1.08	NA C	0.49 NA 0.92 0.76	0.273 >10	0.091 NA	1 NA 8 1.13	NA 1.10	0.97 N 0.92 1.	A 0.88 20 0.82	NA 0.92	0.54	0.57	>10 >10	NA 0.356	2 4	0.88	NA 1.52	1.01 1.06 (0.85 NA 0.65 0.94		NA NA
	ADAM28 ADCK1	ADCK1	57 119	7 2 9 10	0 NA NA 2 0.85 0.90	NA NA	NA 1.33	NA (NA NA	>10 >10	NA NA	2 NA 2 1.02	NA 0.97	0.99 N 0.97 O.	96 1.16	NA 0.71	0.71	NA 0.75	>10 >10	NA NA	1 2	0.92 NA	NA 0.97	0.68 NA (0.68 NA NA 0.70	>10 >10	NA NA
IPI00290279	ADK AFF4		1163	3 89	52 0.93 0.96 2 1.21 1.16	1.10 1.02 1.10 1.04	1.23	0.95 (0.85 0.67	>10 >10	NA NA	48 1.09	1.00	1.03 1. 1.15 1.	08.0	1.08	0.72	0.55	>10 >10	0.893 NA	25 1	1.02	1.22	0.94 0.99 0	0.84 0.82 0.83 0.62	>10	NA NA
IPI00019141			57	7 2	1 NA NA	1.76 NA	1.87	NA 1	.71 NA	>10	NA NA	0 NA	NA	NA N 0.93 N	IA NA	NA	NA NA	NA	>10	NA NA	0	NA NA	NA NA	NA NA	NA NA	>10	NA NA
IPI00215901	AK2		82	2 1	1 0.67 0.87	0.93 NA 1.56 NA	NA	NA	NA NA	>10	NA	1 0.91	0.76	0.62 N	IA NA		NA	NA	>10	NA	0	NA	NA	NA NA	NA NA	>10	NA
IPI00103467 IPI00465439	ALDOA		216	6 12	4 1.18 1.01	0.83 NA 1.09 NA	1.15	NA 1	.01 NA	>10 >10	NA NA	7 1.44	1.18	0.68 N	83 1.20		NA 1.39	0.62	>10 >10	NA NA	3	NA 0.87	NA NA	1.19 NA (NA NA 0.93 NA	>10	NA NA
IPI00005731 IPI00008247	ALK3 ANAPC5	BMPR1A	200		3 0.88 1.01	1 01 1 02	1.00	1.85	175 074	>10 >10	NA NA			1.02 0. 0.96 N		0.94	0.78 NA		>10 >10	NA NA	4 0	1.01 NA	1.28 NA		0.78 NA NA		NA NA
IPI00008248 IPI00025849			70	0 6	1 1.04 1.15 2 NA NA	0.70 NA 0.98 NA 1.45 0.78 0.94 0.63	0.32	NA (0.53 NA 46 1.13	>10	0.014 NA	2 2 11	1.63	1 77 1	00 0.63	1.32	0.92	0.72	>10	NA NA	0	NA NA	NA	NIA NIA	NA NA	>10	NA NA
IPI00023049 IPI0007423 IPI00218918	ANP32B		79	9 5	2 0.95 0.72	0.94 0.63	NA (0.61	NA 1.54	>10	NA NA	1 0.20	0.73	NA 0. 0.92 0.	30 NA	0.79	NA	2.47	>10	0.314 NA	0	NA NA	INA	INA INA	NA NA	>10	NA
IPI00418169	ANXA2		5	4 4	0 NA NA	1.51 NA NA NA	NA	NA	NA NA	>10	NA	3 1.29	0.94	1.05 N 1.01 N 0.89 0.	IA NA	NA	NA	NA	>10	NA	0	NA	NA	NA NA	NA NA	>10	NA NA
	AP2A2		618 438	6 14	8 1.00 0.95 3 1.06 1.06	1.02 0.70 0.96 NA	0.78	0.77 C NA C	0.55 0.42 0.43 NA	3.164 0.454	0.663 0.107	2 1.06	1.16	1.08 0.	68 0.77	1.06 0.51	0.62 0.58	0.49	>10 >10	NA 0.027	10 1	0.93 1.21	1.10 NA	1.05 NA (0.73 0.51 0.59 NA	>10	0.544 NA
IPI00220991 IPI00022256	AP2B1 AP2M1		383 353	3 17	12 0.95 0.87	0.88 0.76 0.85 0.91	0.78	0.63	0.54 0.39 NA 0.34	1.695 2.163	0.485 0.737	11 0.96 8 1.68	0.90	0.87 0. 1.04 0.	74 0.65 79 0.79	0.52 0.65	0.47		0.508 >10	0.076	6	1.09 NA	1.23	0.97 0.85 0 NA 0.90	0.64 0.51 NA 0.72	>10 >10	0.543 NA
IPI00219840 IPI00218693	AP2S1		7:	3 3	2 1 15 1 04	0.98 NA	NA	NA	NA NA	>10	NA NA	1 0.96	1.24	0.96 N	IA NA	NA NA	NA 0.70	NA	>10	NA NA	0	NA NA	NA NA	NA NA	NA NA	>10	NA NA
IPI00020578	ARAF	ARAF	329	9 24	7 1.15 1.06	1.40 NA 1.05 0.99	1.14	0.78	0.97 0.72	>10	NA	5 1.23	1.36	1.10 0.	92 1.01	0.93	0.79	0.66	>10	NA	4	1.05	1.35	0.95 0.89 0	0.70	>10	NA
IPI00440493	ATAD3B ATP5A1		166 588	B 19	3 1.02 1.10 14 1.32 1.26	0.84 NA 1.15 NA	NA 1.06	NA C	NA NA 0.82 NA	>10 >10	NA NA	3 1.24 14 1.16	1.10	1.06 0.	83 1.13	1.18	NA 0.92	0.69	>10 >10	NA NA	3	NA 1.00	NA 0.60	1.06 0.69	1.01 0.40	>10 7.343	NA 8.090
	ATP5C1		424	2 6	8 1.12 1.02 3 0.85 1.19	1.08 NA 0.92 NA	1.43 NA	NA C	NA NA	>10 >10	NA NA	2 0.80	0.94	0.97 0. 0.86 N	IA NA	0.85 NA	0.74 NA	NA	>10 >10	NA NA	1 0	NA NA	1.38 NA	NA NA	NA 0.93 NA NA	>10 >10	NA NA
	ATP5G1 AURKA	AurA	74 1184	4 5 4 89	0 NA NA 39 108 108	NA NA 1.10 1.06	NA 1.15	NA 1.01 (NA NA 192 0.81	>10 >10	NA NA	35 1 01	1.00	NA N 0.97 1.	02 1.04	NA 1.12	NA 0.83		>10 >10	NA NA	1 29	NA 1.09	1.14		NA 1.02 0.91 0.80		NA NA
IPI00176642 IPI00008255		AurB	673	3 33	20 1.02 1.02	1.04 1.17 0.97 0.97	0.97	1.08	0.67 0.78	>10	NA 1.674	21 1.07	0.96	0.99 0. 0.97 1.	91 1.05	1.07	0.75	0.78	>10	NA NA	10	0.96		0.96 0.97 0	0.78 0.70		NA NA
IPI00004497	BCR	BCR	323	4 413	1 NA NA	1.29 NA	0.96	NA C	0.53 NA	>10	NA	1 NA	NA	NA N	IA NA	NA	NA	NA	>10	NA	3	0.67	NA	1.23 NA (0.44 NA	0.838	NA
IPI00337426		BIKE	7490 1522	2 92	402 0.90 0.90 56 0.93 0.99	0.84 0.62 1.06 0.99 1.40 NA	1.12	0.33 (0.26 0.20 0.77 0.50	0.085 >10	0.059 1.062	312 1.00 51 0.95	0.96	0.93 0.	98 0.91	0.95	0.21	0.79	0.045 >10	0.026 NA	92 33	1.02			0.49 0.28 0.91 0.79	>10	0.250 NA
IPI00010862 IPI00303797	BMPR1B BRAF	BMPR1B BRAF	200		O NA NA	NA NA	NA	NA I	NA NA	>10 >10	NA NA	0 NA 1 1.48	NA 1.34	NA N 0.88 0.	IA NA 80 NA		NA NA		>10 >10	NA NA	0	NA NA	NA NA		NA NA		NA NA
IPI00029132 IPI00291010	BTK C17orf63	втк	3959 145		366 0.89 0.95 3 1.15 0.92	0.95 0.83 1.08 1.03	0.68	0.39 (0.26 0.16	0.213 7.961	0.175 3.921	321 0.99	0.94	0.85 0. 0.92 1.	64 0.34	0.26 1.03	0.15		0.054 0.948	0.042	246	1.05	1.07	0.92 0.91 0 1.00 0.86 0	0.85 0.79		NA NA
IPI00013004		ADCK3	310	0 20	8 1.17 1.04	1.07 1.14 1.03 1.05	1.27	0.88	0.92 0.85	>10	NA NA	11 1.14	0.96	1.06 0. 1.03 1.	76 1.16	0.78	0.92	0.59	>10	1.571	9	0.96	1.39	1.05 0.99 0	0.89 0.73	>10	NA NA
IPI00030512	CABLES2	ADCK3	104	4 3	0 NA NA	NA NA	NA	NA	NA NA	>10	NA	1 1.21	1.83	1.58 N	IA NA	NA	NA	NA	>10	NA	0	NA	NA	NA NA	NA NA	>10	NA
IPI00301263 IPI00075248	CALM2		2690 165	5 8	8 1.23 1.29	1.02 1.10 1.14 0.94	1.05 (0.79 (0.54 0.31	>10 1.129	NA 0.633	61 1.06 7 0.84	0.91	1.03 0. 1.19 0. 1.61 N	96 0.92 61 NA	0.74	0.77 NA	0.47	>10 8.536	NA 0.204	33	1.04 0.63	1.24 NA	0.74 NA (0.87 0.77 0.54 NA	>10	NA NA
IPI00020599 IPI00430291		CaMK2d	90 712	0 9 2 71	1 1.14 1.06 7 1.08 1.01	1.13 NA 0.98 1.08	NA 1.08	NA 0.99 (NA NA 0.77 0.65	>10 >10	NA NA	1 NA 7 1.02	NA 1.01	1.61 N 1.00 1.	02 0.87	NA 1.09	0.58		>10 >10	NA NA	1 6	1.54 0.95	NA 1.65		0.92 NA 0.85 1.07	>10 >10	NA NA
IPI00169392 IPI00290239	CAMK2G CAMKK2	CaMK2g CaMKK2	162°	1 476	123 0.84 0.89	0.99 0.99	1.04	91 (82 0.57	>10 6.728	1.518 1.426	111 1.01 39 0.97	1.01	1.02 0.	95 0.97	0.91 1.03	0.79	0.78	>10 >10	NA NA	69 24	1.04	1.28		0.91 0.81 0.90 0.72		NA NA
IPI00005969	CAPZA1 CAPZA2	Odmitte	110	8 0	2 0.97 0.93	1.01 1.02 1.07 0.84	1.09	0.83	0.93 0.68	>10	NA NA	2 NA	NA 0.96	0.89 1.	21 0.99	1.05 NA	0.78 NA	0.99	>10	NA NA	3	1.03	1.20 NA	1.04 0.88 0	0.90 0.84 0.96 NA		NA NA
IPI00218782	CAPZB		74	4 3	2 1.22 1.16	NA 1.11 1.06 1.04	NA (0.84	NA 0.50	>10	0.405	1 NA	NA	1.19 0.	93 0.92	1.01	0.62	0.80	>10	NA	1	1.15	NA	1.01 NA (0.71 NA	>10	NA
IPI00219649	CASP14 CBS		224 98	8 7	0 NA NA 2 1.12 1.09	NA NA 1.06 1.06	NA 1.62	NA 0.97 1	.01 0.85	>10 >10	NA NA	2 0.99	1.02	3.17 N 1.00 1.	16 1.15	NA 0.99	NA 1.07	0.89	>10 >10	NA NA	1	NA 0.82	4.15 0.86	1.00 0.81 0	NA 0.75 0.78 0.45	8.158	NA 3.603
IPI00022865 IPI00294696	CCNA2 CCNB1		154 193		3 0.81 0.86	0.90 0.93 1.06 1.26	1.33	1.21 I 1	.00 1.03	>10 >10	NA NA	3 0.88 4 1.19	1.12	1.00 1. 0.97 0.	30 0.99 83 0.74	1.20 0.87	0.68	0.63	>10 >10	NA 0.095	3	1.06 0.93	0.79 1.53		0.89 0.75 0.72 0.70	>10 >10	NA NA
IPI00021305	CCNH		1045	5 148	50 0.96 0.95 0 NA NA	1.01 1.05 NA NA	1.10 (NA	0.96 C	0.86 0.71 NA NA	>10 >10	NA NA	45 1.02 2 NA	0.95 NA	1.00 1. 0.72 N	IA 0.98	1.06 NA	0.77	0.83 NA	>10 >10	NA NA	28	1.03 NA	1.09 NA		0.90 0.78 NA NA	>10	NA NA
IPI00030247			411	1 15	8 1.02 1.01	0.94 0.85 1.44 NA	1.04	0.79	0.54	>10	2.188 NA	6 1.39 1 2.00	1.53	1.38 1. 1.24 N	13 1.13	0.87	0.83	0.83	>10	NA 0.037	6	0.97	1.53	1.04 1.06 (0.96 0.80	>10	NA NA
IPI00302927	CCT4		115	5 5	2 1.26 1.06	1.05 NA	NA	NA	NA NA	>10	NA	2 1.29	1.42	0.86 N	IA NA	NA	NA	NA	>10	NA	0	NA NA	NA	NA NA	NA NA	>10	NA
IPI00018465			170	0 6	4 1.21 1.20	1.34 NA 1.09 NA	NA	NA	NA NA	>10 >10	NA NA	5 1.28	1.12	0.97 N	IA NA	NA	NA NA	NA	>10 >10	NA NA	2	NA NA	1.57		NA 0.74	>10	NA NA
	CDC2 CDC37	CDC2	250 70		2 1.07 0.69	0.88 NA NA 1.06	0.65	NA C).57 NA	>10 >10	0.024 NA	2 1.36	1.37	1.09 N 1.44 N	IA 1.43	NA NA	0.57 NA	NA	>10 >10	0.559 NA	1 2	0.76 0.47	NA 0.89		0.40 NA 0.70 0.60		NA 0.092
IPI00031681 IPI00023530	CDK2 CDK5	CDK2 CDK5	1040	120	68 0.92 0.96	1.05 1.04 1.13 1.11	1.11 (0.98	0.74	>10 >10	NA NA	60 1.02 103 1.34	0.93	0.99 1.	0.91	1.13	0.75		>10 >10	NA NA	38	0.99	1.01	0.95 0.90 0	0.85 0.73	>10	NA NA
IPI00023529 IPI00000685	CDK6	CDK5 CDK6	103	3 13	0 NA NA	NA NA	NA	NA	NA NA	>10	NA	2 0.86	0.73	0.80	IA NA	NA	NA	NA	>10	NA	1	NA 0.98	0.97	NA 1.14	NA 0.86	>10	NA
IPI00552413	CDK9	CDK7 CDK9	915 587	7 57	17 0.94 1.03	0.99 0.99 1.05 1.06	1.22	1.05	0.85	>10 >10	NA NA	20 1.08	0.98	0.94 0. 0.98 1.	0.97	1.03	0.77 0.75	0.73	>10 >10	NA NA	25 15	0.96	1.04	0.92 0.93 0	0.81 0.77	>10	NA NA
IPI00010896	CKB CLIC1		202	2 4	0 NA NA	1.88 NA NA NA	NA	NA	NA NA	>10 >10	NA NA	4 1.09	0.96		IA NA	NA NA	NA	NA	>10 >10	NA NA	0	NA NA	NA NA	NA NA	NA NA	>10 >10	NA NA
IPI00028061 IPI00028071	CLK1 CLK2	CLK1 CLK2	370 160		10 0.92 0.92	1.11 1.13 1.00 0.82	1.12 (0.95	0.60	>10 1.675	NA 1.102	15 0.86 3 1.09	0.98	0.98 1.	09 1.04	1.07	0.71	0.72	>10 >10	NA 0.587	8	1.01	1.11 NA	0.84 0.88 0	0.75 0.77 1.76 NA	>10 >10	NA NA
IPI00219341	CLK3 CRKL	CLK3	92	2 5	0 NA NA	NA NA 1.20 1.01	NA	NA	NA NA	>10	NA NA	1 NA	NA	1.05 N	IA 1.28	NA 1.04	0.98	NA	>10	NA NA	0	NA 1.15	NA 1.31	NA NA	NA NA 0.89 0.76	>10	NA NA
IPI00013212	CSK	CSK	246	1 344	268 0.93 0.93	1.04 0.97	1.01	71 (0.52 0.20	0.964	0.707	264 1.00	0.95	0.96 0.	86 0.54	0.39	0.20	0.18	0.145	0.102	177	1.07	1.06	0.95 0.90 0	0.90 0.82	>10	NA
	CSNK1D	CK1a CK1d	113°	1 59	38 0.99 1.03 11 1.00 1.01	1.07 1.02 0.99 1.00	1.15	0.98 (0.69	>10 3.267	NA 1.105	5 NA	NA	0.94 0. 1.00 N	IA 1.07	0.93 NA	0.79	NA	>10 >10	NA NA	21 4	1.12		1.03 1.01 (0.86 0.83 0.69 0.61	>10	NA NA
IPI00027729	CSNK1E	CK1e	79	54	10 1.03 1.10	1.08 0.88	1.20	0.85	0.43	6.856	3.573	4 1.10	1.01	1.04 1.	08 1.05	1.04	0.82	0.72	>10	NA	6	1.07	1.30	1.18 0.90 (0.93 0.77	>10	NA

							bosutinib						dasa	atinib							imatinit	,		
IPI acc. no.	Protein	Kinase	highest Mascot	highest	highest SSM used for	kinobeads binding	relative to vehicle	at	[cpd] causing 50% binding	[cpd] at inflection point	highest SSM used for	kinobead	binding relative	e to vehicle at		[cpd] causing 50% binding	inflection	highest SSM used for		kinobead	s binding relative to ve	nicle at	[cpd] causing	inflection
IPI acc. no.	Protein	Kiriase	score	SSM	quantification 0.0001 0.00 uN	1 0.01 0.033 uM uM	0.1 0.33 uM uM	1.0 10 uM uM	reduction (uM)	of curve (uM)	quantification 0.0001 uM	0.001 0.01 uM uM	0.033 0.1 uM uN	0.33 1.0 uM uM	10 1 uM	reduction (uM)	point of curve (uM)	quantification	0.01 uM	0.033 uM	0.1 0.33 uM uM	1.0 10 uM ul	reduction (uN	
IPI00218437	CSNK1G1 CSNK1G3	CK1g1 CK1g3	457 932	2 76	31 0.83 0.9	1.00 0.97	1.08 0.91	0.92 0.83	>10 >10	NA NA	0 NA 35 0.94	NA NA 0.95 0.97	NA NA 0.97 0.93	1.07 0.7	NA 1 0.88	>10 >10	NA NA	0 13	NA 1.05	NA 1.15	NA NA 1.04 0.96	NA N. 0.93 0.8	11 >10	NA NA
IPI00016613 IPI00020602	CSNK2A2	CK2a1 CK2a2	572 110	1 82	67 0.06 0.0	1.02 0.90 1.02 0.96	1.02 0.00	0.00 0.03	>10 >10	NA NA	56 1.05	1.00 0.99	0.95 0.99	0.96 0.56 0.97 0.69	9 0.78	>10	0.518 NA	20 20	1.01	1.30	0.96 0.90	0.71 0.5 0.94 0.6	7 >10	0.373 NA
IPI00290142	CSNK2B CTPS CYFIP1		457 51	1 6	13 1.06 1.1 1 NA NA	1.16 0.97 1.07 NA 1.07 NA 1.00 1.12	1.11 0.92 1.15 NA	0.91 0.77 0.82 NA	>10 >10 >10	NA NA	2 NA	1.25 1.01 NA 0.98	0.84 1.0	0.92 0.70	6 0.91 0 0.66	>10 >10 >10	NA NA	12	1.04 NA 0.98	1.97	1.00 0.90 NA 0.63	NA 1.1	7 >10	3.351 NA
	DCK	DDR1	416	6 21	14 0.92 0.9 11 0.90 0.8	1.00 1.12 0.91 1.01	1.17 0.91 1.01 0.85	0.92 0.92 0.62 0.44	>10	NA NA 0.767	13 1.06 8 1.04	1.04 1.00 0.96 0.94	1.14 1.0	NA NA 1.12 0.7 2 0.51 0.3	7 0.97	>10 >10 0.275	NA NA 0.113	5	1.01	1.03	1.68 NA 1.01 0.88 0.65 0.42	0.76 N. 0.85 0.8 0.53 0.2	A >10 16 >10 18 0.179	NA NA 0.090
IPI00026829 IPI00298547	DHPS DJ-1		377 105	7 9 5 4	8 0.94 1.0 2 1.57 1.2	0.91 1.01 0.92 1.36 0.94 NA	1.20 1.03 NA NA	0.86 0.84 NA NA	>10 >10	NA NA	8 1.11 3 1.13	1.04 1.19 1.11 1.00	0.81 1.1: 0.84 NA	0.51 0.30 0.96 0.90 0.86 NA	7 0.58	>10 >10	2.725 0.504	3 0	1.88 NA	2.23 NA	0.65 0.42 1.26 1.01 NA NA	1.22 1.1 NA N.	0 >10 A >10	NA NA
IPI00604707	DKFZp686K16132 DLAT		103	4 77	1 NA NA 31 0.93 1.0	0.93 NA 1.01 0.93 1.08 1.07 1.02 0.86	0.83 NA 0.97 0.88	0.61 NA 0.89 0.75	>10 >10	NA NA	2 NA	NA 0.89 0.95 0.96 0.98 0.88	NA 1.0	' NA 0.5	5 NA 3 0.79	>10 >10	NA NA	3 31	1.04	1.12	0.83 0.84	0.70 0.7	8 >10	NA NA
IPI00022602	DNAJC10 DOK2 DSG1		22° 57°	7 34	5 1.10 1.1 9 0.93 0.9	1.08 1.07 1.02 0.86 NA NA	1.04 0.96 0.97 0.63	0.84 0.85 0.46 0.25	>10 0.716 >10	0.461 NA	8 0.96 2 1.19	0.95 0.86	0.64 0.4	0.34 0.14	7 0.86 4 0.25 NA	>10 0.067 >10	NA 0.045 NA	10	0.99 0.90 NA	1.01 1.42	0.95 1.00 0.95 1.06 NA NA	0.81 0.7 0.71 0.7	7 >10 75 >10 A >10	NA NA NA
IPI00019329	DYNLL2 DYRK1A	DYRK1A	24		12 1.13 1.0 4 1.14 1.1	1.06 0.98 0.99 1.04 1.12 0.93	1.07 1.04 0.97 0.90	0.89 0.77 0.84 0.74	>10	NA NA	10 1.00	0.96 0.95	1.13 1.0	1.33 0.79	9 1.14	>10	NA NA	8		1.24	1.01 0.99	0.87 0.7	8 >10	NA NA
IPI00472724 IPI00014424	EEF1A2		759 759	9 34 9 34	2 1.62 1.1	0.99 NA	NA NA	NA NA	>10 >10	NA NA	0 NA	NA NA	NA NA	1.16 0.7 1.27 0.8 NA NA	NA.	>10	NA NA	11 0	0.94 NA	1.16	1.01 0.83 NA NA	NA N.	A >10	NA NA NA
IPI00186290	EEF1G EEF2		133 196 370	2 3 6 15	2 1.48 1.1 3 1.13 1.1	1.18 NA 1.05 1.26	NA NA 1.01 0.85	NA NA 0.91 0.78	>10 >10	NA NA	7 1.06	1.32 1.04 0.89 0.91	0.93 0.9	1.09 0.63	NA 3 0.78	>10 >10	NA NA	0 4	NA 0.82	1.81	0.91 0.88	NA N. 0.92 0.6	3 >10	NA
IPI00328149 IPI00163851 IPI00290461		HRI GCN2	370 399 652	9 15	7 0.81 0.8 10 1.02 1.0	1.03 1.03 1.03 0.84 0.97 1.02	1.11 0.82 0.80 0.76	0.74 0.41 0.61 0.75	3.072 >10 >10	1.220 NA NA	8 1.16 4 0.94	1.06 0.91 0.91 1.09	0.89 0.8 0.95 1.2	1.04 0.5 0 0.96 1.1 0 0.96 0.7	7 0.54 5 0.98	>10 >10 >10	0.719 NA NA	4	1.08 0.94 0.91	1.17	1.10 0.94 0.83 0.98 0.95 0.73	0.96 0.6	11 >10 '8 >10 i0 >10	NA NA 1.256
IPI00386604	EIF4A1 ENO1		52	2 3	0 NA NA 7 184 12	NA NA	NA NA 1.62 NA	NA NA	>10 >10 >10	NA NA	1 1.06	1.21 0.48 0.98 0.71	0.98 NA	1.05 NA NA NA	0.68	>10	0.866 NA	0	NA 0.89	NA	0.95 0.75 NA NA 1.40 NA	NA N.	A >10	NA NA
IPI00008318 IPI00008315	EPHA4 EPHB1	EphA4 EphB1	142 492	2 9 2 29	1 0.69 1.2 5 1.03 0.9	NA NA 1.27 NA 0.85 NA 1.08 0.84	NA NA 1.05 0.74	NA NA 0.47 0.40	>10	NA 0.369	1 1.32 4 1.02	1.12 0.83 1.00 0.74	NA NA	NA NA	NA NA	>10 >10	NA NA	1 4	0.80	1.69	1.20 0.88 1.08 0.97	0.70 0.5	5 >10 6 >10	0.765 NA
	EPHB3	EphB2 EphB3	457 546	6 43	8 0.89 0.8	0.85 0.90 0.93 NA 0.86 0.65	0.76 0.96	0.51 0.78	>10 0.422	3.697 NA	1 NA	NA NA	NA NA	NA 0.5	NA NA	>10	0.003 NA	5 0	1.15 NA	1.38 NA	1.20 1.15 NA NA 1.00 0.97	1.07 0.8 NA N.	11 >10 A >10	NA NA
	ERCC2	EphB4	1900	2 105	59 0.97 0.9 69 0.95 0.9	0.86 0.65 1.04 0.92	0.52 0.37 1.11 0.91	0.33 0.24 0.81 0.67	0.108 >10	0.048 NA	74 1.02	0.99 0.62 0.98 0.98	1.06 0.9	1.08 0.74	2 0.18 4 0.84	>10	0.009 NA	46 36	1.00					NA NA
IPI00291364 IPI00009841 IPI00328846	ERCC3 EWSR1 FAM83A		100 100 89	7 14	2 1.14 1.0 3 1.05 1.2	1.04 0.92 1 1.93 NA 1 1.09 0.99	1.36 NA 0.88 0.92	0.65 NA 0.61 0.76	>10 >10 >10	NA NA 1.829	1 0.72 2 1.10	1.49 1.06	1.75 0.70	NA NA 0 2.06 0.58 3 0.95 0.9	NA 8 0.66	>10 >10 >10	0.112 NA	2	NA 1.21	1.51	NA NA 1.27 0.96	1.19 0.7	A >10 '1 >10 '8 >10	NA NA NA
IPI00326781 IPI00554589	FASN		240	0 20	84 0.94 1.0	1.03 1.02 1.09 NA 1.03 1.07	1 07 0 00	0.87 0.80	>10	0.185 NA	4 0.85 71 1.01	0.99 1.00 0.78 0.74 1.01 0.98	0.97 NA 0.95 1.0	1.06 NA 1.01 0.8	0.83	>10	NA NA	0 58	NA 1.04	1.09	1.02 0.94 NA NA 0.95 0.93	0.86 0.7	3 >10	NA NA
IPI00029263 IPI00005142		FER FGFR1	155°	4 30	63 0.94 0.9 9 0.91 0.8	1.04 1.07 1.07 1.13 1 1.09 1.08 NA 1.18	1.09 0.94 1.32 0.96	0.69 0.37 0.91 0.73	1.851 >10	0.978 NA	55 1.05 6 1.01	0.95 0.97 0.98 1.04	1.06 0.99 1.04 1.2	1.12 0.79	5 0.84 7 0.81	>10 >10	NA NA	44 8	1.04	1.22	0.94 0.92 1.04 0.94	0.85 0.7	75 >10 70 >10	NA NA
IPI00012443 IPI00060574			497	3 2	11 0.98 1.0 1 NA NA	1.09 1.08 NA 1.18	1.27 0.96 NA 2.47	0.87 0.87 NA 1.25	>10 >10	NA NA	0 NA	0.96 0.94 NA NA	NA NA	NA NA	9 0.71 NA	>10 >10	NA NA	7 0	0.94 NA	1.29 NA	0.98 1.03 NA NA	0.81 0.8 NA N.	A >10	NA NA
IPI00026256 IPI00442821 IPI00332067	FLJ26613		169 133	2 6	1 NA NA 1 NA NA	0.90 0.94 NA 0.85 0.87 0.99	NA 0.99	NA 0.48 NA 0.79	>10 >10 >10	0.041 NA NA	4 NA 2 1.14	NA 1.08 1.01 0.91 0.98 0.91	NA 2.6		9 NA NA 3 NA	>10 >10 >10	NA NA NA	0	NA NA 1.04	9.23 NA	NA 0.93 NA NA 1.03 0.83 NA 0.80	NA 0.7	2 >10 A >10 i9 >10	NA NA NA
IPI00032007 IPI00018522 IPI00099986	FLJ46072		50	5 6	0 NA NA 10 0.96 0.9	NA NA 1.11 0.97 0.90 1.01	NA NA 1,27 0,94	NA NA 0.95 0.83	>10 >10 >10	NA NA	0 NA 8 0.93	NA NA 0.86 0.87	NA NA 1.07 0.9	NA NA 1.19 0.6	NA NA	>10 >10 >10	NA NA	2	NA 0.91	1.77	NA 0.80 0.90 0.89 1.24 0.93	NA 0.7 0.84 0.7	7 >10 17 >10 13 >10	NA
	FRK	FRK	15	4 14 3 2	5 0.96 0.8 1 1.59 1.1	0.90 1.01 1.02 NA 1.18 1.05	NA 0.79 NA NA	NA 0.29 NA NA	0.649 >10	0.507 NA	1 0.98	0.64 0.74	NA NA	NA NA NA NA 0 0.88 0.6	NA.	>10	NA NA	5 0	1.06 NA	1.13 NA	1.24 0.93 NA NA 1.43 1.44	0.97 0.7 NA N.	'8 >10 A >10	NA NA NA
IPI00260715 IPI00219012	FYN	FYN	15°	238	38 0.93 0.9	0.96 0.88	0.85 0.63	0.45 0.33	>10 0.700	NA 0.324	35 1.05	1.00 0.85	0.56 0.63	0.52 0.3	0.24	0.199	NA 0.052	3 20	1.51	0.99	0.96 1.02	0.79 0.7	2 >10	NA
IPI00298949 IPI00008790 IPI00011454	GALC	GAK	4400 500	6 18	17 0.96 1.1	0.81 0.56 1 1.04 1.00	0.92 0.94	0.88 0.66	0.056 >10 >10	0.036 NA NA	9 1.03	0.98 0.97 1.02 0.99	0.93 1.03	0.59 0.34 3 1.16 0.74	4 0.84	>10	0.227 NA NA	154 5	1.06 1.02 NA	1.16	0.99 0.91 0.93 0.89	0.85 0.7	6 >10	NA NA NA
IPI00011454 IPI00219018 IPI00292753	GAPDH		562 781	2 21	11 1.94 1.5 18 0.96 0.8	NA NA 1.18 1.17 1.02 1.01	1.38 0.85 1.04 0.94	1.19 0.96 0.81 0.56	>10 >10 >10	NA 1.213	13 1.22 21 1.00	0.99 1.00 0.99 1.03	0.95 1.1	NA NA 5 1.30 0.73 0 1.14 0.66	3 0.80 8 0.76	>10 >10 >10	NA NA	8 17	0.97 1.02	1.91	NA NA 1.19 0.85 1.06 0.93	1.08 0.7 0.92 0.7		NA NA
IPI00001159 IPI00029079	GCN1L1 GMPS		127	1 41 8 3	28 0.99 0.9	0.96 1.09	1.00 1.05 NA NA	0.82 0.77 NA NA	>10 >10	NA NA	28 1.03 0 NA	1.03 1.06 NA NA	0.93 1.0° NA NA	1.11 0.6	8 0.83 NA	>10 >10	NA NA	8	1.00 NA	1.19 NA	0.88 0.99 NA NA	0.96 0.7 NA N.	'9 >10 A >10	NA NA
IPI00180434	GNB1L GRAMD1A		7° 878	8 67	1 NA NA 26 1.06 0.9	NA 1.08 1.03 0.98 0.81 0.47	NA 0.86 1.15 0.90	NA 0.59 0.85 0.72	>10 >10	NA NA	0 NA 30 1.00	NA NA 1.04 0.98	NA NA 1.21 0.9	NA NA 1.27 0.6	NA 9 0.85	>10 >10	NA NA	0 24	NA 1.11	NA 1.13	NA NA 1.04 0.95	NA N. 0.89 0.7	A >10 '8 >10	NA NA
IPI00021327 IPI00292228 IPI00216190		GSK3A GSK3B	735 1905 1740	9 300	91 0.93 1.0	1.03 1.01 1.03 1.02	1.03 0.92	0.24 0.16 0.86 0.77	0.034 >10 >10	0.024 NA NA	30 0.95 91 1.04	0.88 0.72 1.02 0.98	0.92 0.9	0.24 0.2 0.97 0.74 0.99 0.8	7 0.16 4 0.78	0.021 >10 >10	0.016 NA NA	16 79	1.06 1.06 1.10	1.08	0.79 0.48 0.97 0.95 0.98 0.97	0.41 0.2	26 0.365 12 >10 13 >10	0.143 NA NA
IPI00016862		GSK3B	160	8 5	3 1 1 2 1 1	1 09 1 09	NA 1 00	NA 0.87	>10 >10 >10	NA NA	3 0.90	0.99 0.97 0.92 0.99 0.93 0.74	NA 1.1:	NA 1.0	0 NA 0 0 70	>10	NA NA	1	1.28	NA NA	1.05 NA 1.27 NA	1.07 N. 1.75 N.	A >10	NA NA
IPI00031522 IPI00022793	HADHB		936 366 56	0 26	20 1.03 1.0 8 0.99 1.0	i 1.28 NA 0.91 1.08 i 1.06 0.91 NA NA	1.16 0.90 0.95 0.89	0.56 0.59 0.85 0.74	>10 >10	0.389 NA	17 1.07 10 0.99	1.03 1.02 0.94 1.04	1.09 0.8	0.89 0.60	6 0.68 6 0.77	>10 >10	NA NA	4 2	0.85 1.05	1.39 1.17	0.85 0.92 1.19 0.80 NA 1.38	0.81 0.7 0.92 0.8	7 >10	NA NA
IPI00029769		HCK	783	3 69	16 0.87 0.9	0.99 0.93	0.95 0.70	0.56 0.34	>10 1.178	NA 0.580	2 1.24 12 1.05	0.98 0.86 1.03 0.97	0.88 NA NA 0.73	1.15 NA 3 NA 0.4	0.90 1 NA	>10 0.439	NA 0.155	1 7	NA 1.04	1.11	1.04 0.95	0.94 0.8	14 >10	NA NA
IPI00719084 IPI00453473 IPI00028888	HIST4H4		169 81 63	1 3	2 8.86 1.3 2 13.45 1.2	1.59 NA 1.09 NA 1.01 NA	NA NA	NA NA	>10 >10 >10	NA NA NA	2 1.56 2 0.88	1.56 3.56 0.79 3.27 NA NA	NA 0.8	NA 0.2	1 NA 6 NA NA	0.163 >10 >10	0.145 0.050 NA	0	NA NA NA	NA NA	NA NA NA NA NA NA	NA N. NA N.	A >10	NA NA NA
IPI00028888 IPI00003881 IPI00479191	HNRPF		159	9 7	3 0.70 0.9 0 NA NA	1.09 0.79 NA NA	1.32 1.20 NA NA	0.77 0.93 NA NA	>10 >10 >10	NA NA	5 1.22	1.15 1.24 NA NA	NA 1.43	NA 1.0	4 NA	>10	NA NA	2	NA NA	2.04	NA 0.70 NA NA	NA 0.4	7 0.805	NA NA
IPI00216746 IPI00025054	HNRPK HNRPU		112	2 7 5 4	1 0.95 1.2 0 NA NA	0.78 0.75 NA NA 0.95 1.09	NA 0.57 NA NA	NA 0.62 NA NA	>10 >10	0.008 NA	3 1.50	1.18 0.95	NA 0.9	NA 0.60 NA 0.60 NA 0.60	6 NA	>10 >10	NA NA	2	0.85 NA	0.96	0.85 0.99	0.80 0.5 NA N.	i8 >10 A >10	1.115 NA
IPI00398625 IPI00019912	HSD17B4		322°	4 228	8 0.81 1.2 130 1.06 1.1	0.95 1.09 1.10 1.03 1.03 0.92	1.11 0.80 1.17 1.00	0.65 0.64 0.92 0.81	>10 >10	NA NA	117 1.10	1.07 1.05	0.98 1.03	1.03 0.83	3 0.81	>10 >10	NA NA	0 89	NA 1.09	1.15	1.03 0.99	NA N. 0.91 0.8	2 >10	NA NA
IPI00514377 IPI00002966 IPI00003362	HSPA4		800 60 944	2 4	21 1.08 1.0 0 NA NA	NA NA 0.95 0.87 0.97 0.78	0.82 0.74 NA NA	0.53 0.48 NA NA	3.366 >10 >10	0.186 NA 0.337	1 0.80	1.10 0.89 0.74 0.97 0.99 0.88	0.75 0.69 NA NA		5 0.52 NA 4 0.72	>10 >10 >10	0.025 NA 0.150	14	1.00 NA 1.09	1.22 NA 1.33	NA NA	0.70 0.6 NA N. 0.79 0.6	A >10	NA NA NA
IPI00003362 IPI00003865 IPI00007765	HSPA8		1685 862	5 82	52 0.99 0.9 22 1.21 1.1	0.97 0.78	0.76 0.57 0.77 0.66	0.49 0.37 0.53 0.42	0.747	0.156 0.202	42 1.07	0.99 0.88 0.93 0.87 0.95 0.92	0.74 0.6	0.97 0.5 0.60 0.4 0.62 0.5	2 0.44	0.830	0.150 0.043 0.143	12 26 15	1.15		0.94 0.76		i4 >10	0.345 NA
IPI00025512 IPI00382470	HSPB1 HSPCA		51°	4 7 1 39	1 1.33 1.6 4 1.52 1.2	0.97 0.78 0.97 0.92 1 1.20 NA 1 1.11 1.03 1.09 0.97 1 1.12 1.34	1.41 NA 1.10 0.65	0.80 NA 0.73 0.61	>10	NA NA	0 NA	NA NA	NA NA	NA NA	NA NA	>10	NA NA	1 5	1.10 0.98	12.34	1.41 0.57 1.00 0.74	1.66 0.7 0.82 0.6	'0 >10 i6 >10	NA NA
IPI00414676 IPI00472102	HSPD1		864 669	9 23	15 1.44 1.2 14 1.44 1.2	1.09 0.97 1.12 1.34	1.19 0.82 1.51 0.98	0.86 0.75 0.86 0.81	>10 >10	NA NA	19 1.16 12 1.09	1.04 0.97 0.83 0.83	0.81 0.8 0.78 0.9	0.91 0.66 0.89 0.66 0.97 0.6	0 0.68 1 0.63	>10 >10	NA NA	10 9	1.04 0.92	1.24	1.05 0.81 1.01 0.85	0.81 0.6 0.78 0.6	i4 >10 i8 >10	NA NA
IPI00024284 IPI00163147 IPI00175647	HYPOTHETICAL		100 49 346	9 3	2 0.82 1.0 0 NA NA	1.12 1.34 1.06 NA NA NA 0.92 NA 1.00 NA 1.00 NA	NA NA	NA NA NA NA	>10 >10 >10	NA NA NA	2 0.82 1 0.71	0.98 0.83 0.41 1.36 NA 1.16	NA NA	NA NA	NA NA NA 3 0.77	>10 >10 >10	NA NA NA	0	NA NA 0.71	NA NA	NA NA NA NA 0.64 0.86	NA N.	A >10 A >10 i9 >10	NA NA 0.967
IPI00024970			346 97 224	7 10	3 NA NA 65 0.90 0.8	1.00 NA 1.00 NA	0.91 NA 0.41 0.35	0.79 NA 0.26 0.21	>10	NA NA 0.040	3 NA 79 1.01	NA 0.96 0.96 0.78	0.97 1.03	0.73 0.6	7 0.94	>10	NA NA 0.019	5 1 40	0.99	1.09	0.90 0.96	0.46 0.7	0 >10	0.967 NA 0.242 NA
IPI00017503 IPI00067503	IPI00030755.1 IPI00067503.1		65 43	5 4 3 2	0 NA NA 1 NA NA	NA NA 0.91 NA 0.73 NA	NA NA 0.99 NA	NA NA 0.98 NA	>10	NA NA	0 NA 0 NA	NA NA NA NA	NA NA	NA	NA NA	>10 >10	NA NA	2	0.76 NA NA	NA NA	1.00 NA NA NA NA NA	0.62 N.	A >10 A >10	NA NA NA
IPI00335775 IPI00007402	IPI00335775.1		66 198	6 2	2 1.16 1.5 4 0.88 0.9	0.73 NA 0.95 NA	NA NA 1.34 NA	NA NA 0.98 NA	>10 >10	NA NA	2 1.07 5 1.02	1.24 1.40 1.02 1.07	NA 0.8 0.86 0.8	NA 0.48	5 NA 4 0.88	0.268 >10	0.135 NA	0	NA 0.94	NA 1.48	NA NA 0.81 1.36	NA N. 0.68 0.7	A >10 '1 >10	NA NA

								bosutin	ib							dasat	nib								imatinib				
			highest Links	highest SSM		kinobead	s binding	relative to ve	ehicle at		[cpd] causin 50% binding	g [cpd] at	highest SSM		kinobeads bir	nding relative	o vehicle at		[cpd] causing 50% binding	[cpd] at inflection	highest SSM		kinobea	ds binding r	elative to veh	icle at	1	[cpd] causing	[cpd] at inflection
IPI acc. no.	Protein	Kinase	Mascot score highest SSM	used for quantification 0.00	0.001	0.01	0.033	0.1 (uM	0.33	1.0 10 uM uM	reduction (uM)	inflection point of curve (uM)	used for 0.0	0001 0.0	001 0.01 0 M uM	0.033 0.1	0.33 1.0 uM uM	10 uM		point of curve (uM)	used for quantification	0.01	0.033	0.1	0.33	1.0	10 re	50% binding eduction (uM)	point of curve (uM)
IPI00014255			57 3	1 N/	NA.	NA	0.28	NA (0.95	NA 0.59	>10	NA NA	1	NA N.	IA 1.29 1	1.53 1.07	1.75 0.60	0.94	>10	NA	0	uM NA	uM NA	uM NA	uM NA	uM NA	uM NA	>10	NA
IPI00293652 IPI00003031	ISOC2	IRAK1	214 12 320 16	4 0.8 7 0.9	7 1.17 5 1.01	0.99	NA 0.95	1.09	NA).97	0.72 NA 0.79 0.61	>10 >10	NA NA	11 1	1.01 0.9 1.08 1.1	12 1.01 (0.91 1.05	NA 0.80 0.96 0.65	0.58	>10	NA 0.562	1 8	0.80 1.22	NA 1.15	1.01	0.96	0.95	NA 0.73	>10 >10	NA NA
IPI00011633 IPI00031016 IPI	JAK2	JAK1 JAK2	2091 105 156 9	2 N/	NA.	0.98	NA	0.97	NA	0.89 0.61 0.52 NA	>10 >10	NA NA	3 0	1.09 1.0 0.66 0.8	89 0.52	NA NA	0.93 0.73 NA NA	. NA	0.012	NA NA	31 1	1.03	1.04 NA	0.95 1.04	NA	0.80	0.58 NA	>10 >10	1.200 NA
IPI00554711 .			61 4 41 1	1 N/	NIA.	1 20	NA	1 1 /	NIA	4 24 NA	>10 >10	NA NA NA	0	NA N.	IA NA	NA NA	NA NA	NΔ	>10	NA NA	0	NA NA	NA NA	NA	NA NA	NA	NA NA	>10 >10	NA NA NA
	KHDRBS1		55 3 87 10	1 1.1 0 0 N/	3 1.39 NA	1.48 NA	NA NA	NA NA	NA NA	NA N	>10 >10	NA	1 1	1.17 1.1 NA N.	IA NA 17 1.07 IA 1.41 18 1.24 (09 1.04 (NA NA NA 1.53	NA NA NA 0.86	NA NA	>10 >10	NA NA	1	NA 0.86	4.03 1.96	0.96	0.83	NA 0.79	0.79	>10	NA
	KHDRBS2 KHSRP		75 8 259 14	1 NA 6 0.9	NA 9 1.03	1.20	0.89	0.85 (1.03 ().81).75	0.85 0.83 0.63 0.60	>10 >10	NA NA	1 1 3 1	1.20 1.1 1.46 1.0	18 1.24 (09 1.04 (0.99 NA 0.91 1.24	1.11 NA 1.20 0.75	0.78	>10	NA NA	1 4	NA 1.10	1.11	NA 1.07	1.08	NA 0.92	0.72	>10 >10	NA NA
IPI00641384 IPI00465142	KIAA0528		494 25 794 59	14 0.9 14 0.9	3 0.98 4 0.93	0.96	0.91	1.00 (0.83	0.73	>10 >10	NA NA			93 0.97 1 01 0.98 0 91 0.90 0					0.904 NA	10 12		1.60	0.96	1.06 0.94 0.76	0.89	0.73	>10 >10	NA NA
IPI00657720 IPI00022296	KIT	QSK	957 84 1008 85	20 1.0	2 1.01 9 0.88	1.06	0.95 0.94	0.92 (0.73	0.48 0.39 0.83 0.64	0.969 >10	0.346 NA	32 1	1.02 0.9	92 0.92 0	0.92 0.75	0.65 0.36	0.29	0.551	0.323 0.299	17 20	1.04 0.95	1.13	1.07 0.97	0.76 0.89 NA	0.87	0.74	>10 >10	NA NA
IPI00001639	KPNB1 LCP1		117 5 94 5	2 1.0 0 NA	7 1.04 NA	0.94 NA	0.25 NA	NA ().92 NA	NA 0.54 NA NA	>10 >10	0.013 NA	3 1	1.05 0.8 0.71 0.6	81 1.23 66 0.90 0	NA NA 0.58 NA	NA NA 1.04 NA	. NA 0.75	>10	NA NA	0	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	>10 >10	NA NA
IPI00217966 IPI00148061	LDHA LDHAL6A		240 10 67 8	5 2.6 0 N/	6 1.83 NA	1.28 NA	NA NA	1.58 NA	NA NA	1.14 NA NA NA	>10 >10	NA NA	4 1	1.03 0.8 NA N.	86 0.90 IA 1.10 88 1.18 (NA 1.33 NA 1.42	NA 0.92 NA 0.41	NA NA	>10 0.776	NA NA	1	0.79 0.50	NA NA	1.26 1.03	NA NA NA	1.07 0.37	NA NA	>10 0.521	NA NA
IPI00219217 IPI00023673	LDHB LGALS3BP		155 7 67 4	2 N/ 1 2 0.9	NA 2 0.93	1.64	1.06 1.12	1.82 (1.35 1).81 1.06	NA NA 1.14 NA NA NA 1.84 0.82 1.04 0.85	>10 >10	NA NA	2 0	0.94 0.8	88 1.18 0 74 0.81 1	0.74 1.09 1.59 0.87	0.95 0.82 1.38 0.58	2 0.65	>10	NA 0.014	0	NA 1.59	NA 1.05	NA 0.90	NA 1.12	NA 1.05	NA 1.09	>10 >10	NA NA
	LIMK1 LIMK2	LIMK1 LIMK2	506 21 636 48	15 1.0 16 1.0	6 1.06 5 1.02	1.10	0.92 1.14	1.20 1 1.28 1	1.00	0.90 0.80 0.93 0.81 0.78 0.34 NA NA NA NA	>10 >10	NA NA	12 1	1.15 1.0	02 1.01 (0.89 1.11	1.00 0.64	0.51	>10	0.725 0.587	6 15	1.05 1.10	0.88	0.98	0.88	0.75	0.70	>10 >10	NA
IPI00025746 IPI00218084			161 11	2 1.1 3 2 1.9	6 1.20 3 1.80	1.28	1.10 NA	0.83 (NA).57 NA	0.78 0.34 NA NA	>10 >10	0.204 NA	2 1	1.52 1.5	97 0.96 0 84 0.85 0 55 1.11	NA NA	NA NA	. NA	>10	0.371 NA	2	0.93 NA	0.97 NA	0.88 NA	0.90 1.00 NA 1.02	0.48 NA	0.77 NA	>10 >10	NA 0.549 NA
IPI00016861 IPI00021396	LOC149329 LOC389322		82 3 187 12 47 6									NA NA	0	NA N	IA NA	NA NA	NA NA	NA NA	>10	NA NA	3	NA 1.45	1.13 NA	NA 1.09	1.02 NA	NA 1.07	0.89 NA	>10 >10	NA NA
IPI00399212 IPI00457307	LOC389842		59 3 108 9	1 1.1 2 1.5	3 1.17 4 1.40	1.25	NA NA	NA 0.84	NA NA	NA NA 0.41 NA NA NA NA NA NA NA 1.25 0.72	>10 0.202	NA 0.129	1 1	1.10 0.6 1.13 1.0	67 0.90 02 0.92 IA NA 94 0.76	NA NA NA 0.61	NA NA NA 0.60	NA NA	>10 >10	NA 0.017	1	1.32	NA NA	0.86 1.52	NA NA	1.24	NA NA	>10 >10	NA NA
	LOC402102 LOC441388		37 5 55 4	0 N/	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	>10 >10	NA NA	0 1 0	NA N.	IA NA 94 0.76	NA NA	NA NA	NA NA	>10 >10	NA NA	1 0	NA NA	2.72 NA	NA NA	1.13 NA	NA NA	0.13 NA	0.607 >10	NA NA
IPI00396563 IPI00396321	LOC51035 LRRC59		47 4 76 8	2 N/ 3 1 1.1	NA 3 1.23	2.10	1.46 0.67	2.51 1 NA (1.80	1.25 0.72 NA 0.52	>10 >10	NA 0.012	2	NA I N	IA I 4.38 I 1	1.12 I 4.16	1.46 2.18	3 0.82	2 >10	NA NA	1 0	1.29 NA	0.93 NA			0.74	0.49 NA	1.738	1.000 NA
IPI00006932 IPI00298625	LUC7L2 LYN	LYN	104 5 2234 394	2 1.2 112 0.8	3 1.16 6 0.89	0.97	NA 0.91	NA 0.88 (NA 0.63	NA 0.52 NA NA 0.43 0.21	>10 0.647	NA 0.496	111 0	NA N.	IA 1.08 IA NA 96 0.91 (NA NA 0.91 0.57	NA NA 0.48 0.19	NA 0.27	>10	NA 0.116	0 71	NA 1.12	NA 1.03	NA 0.95	1.44 NA NA 0.92	NA	NA	>10 >10	NA NA
IPI00007321	LYPLA1 LYPLA2		80 2 84 3	2 0.7	9 0.96	0.75	NA NA	NA NA	NA NA	NA NA	>10	NA NA	0	NA N. 0.95 0.7	IA NA	NA NA	NA NA	. NA	>10	NA NA	0	NA NA	NA NA	NA	NA NA	NA	NA	>10	NA NA
	MAN2C1	MAP2K2	37 1	0 N/	NA NA	NA 0.95	NA NA	NA 0.90	NA NA	NA NA 0.80 NA 0.81 NA 0.49 0.33 0.78 0.51	>10	NA NA	1	NA N.	IA NA 1	1.11 NA	1.20 NA	0.95	>10	NA NA	0	NA 0.99	NA NA	NA	NA	NA	NA	>10	NA
IPI00185860		MAP2K5 MAP3K1	84 6 287 8 762 54	3 1.0	9 1.08	1.12	NA 0.81	1.17	NA) 55	0.81 NA 0.49 0.33	>10	NA 0.156	5 1	1.11 0.9 1.07 1.0	69 0.83 0 97 0.99 1 04 1.09 1	1.10 0.96 1.05 1.03	1.03 0.6° 0.93 0.6°	0.37	1.200	0.888	2	0.91	0.96 1.18	0.86	NA 0.80 0.77	0.73	0.64	>10 >10 >10	NA NA NA
IPI00000977 IPI00513803	MAP3K11	MLK3 MAP3K2	260 16 397 33	7 1.0 3 0.8	7 1.05	1.08	0.99	1.02 (0.88	0.78 0.51	>10	1.540 0.968	6 1	1.21 1.1 0.78 0.9	11 0.99 0	0.74 0.83	0.83 0.55 0.95 0.70	0.47	4.871	0.341 43.273	4	1.04	1.34	1.00	0.89	0.87	0.70	>10	NA NA
IPI00181703 IPI00386260	MAP3K3	MAP3K3 MAP3K4	310 28 3204 195	6 0.9	5 1.04	0.93	1.11	0.98 (0.78	0.61 0.39	1.753 0.752	0.612 0.299	6 0	0.83		1.28 1.09	1.21 0.75	0.88	>10	NA 0.326	2	0.97	1.08	1 10	0.77	0.87	0.85	>10	NA NA
IPI00412433		MAP3K5 HPK1	69 7 79 7	0 N/	NA 8 1.00	NA 0.96	NA NA	NA NA	NA NA	0.69 0.41 0.61 0.39 0.49 0.34 NA NA NA 0.56 0.36	>10	NA NA	1	NA N.	IA NA 1	1.04 NA NA 0.68	0.91 NA NA 0.84	0.69	>10	NA NA	0	NA 1.42	NA NA	NA 1.45	0.89 NA NA 0.92	NA 1.10	NA NA	>10	NA NA
IPI00149094 IPI00217024	MAP4K2	GCK KHS2	236 15 239 13	3 1.1	3 1.25	1.05	0.84	0.95 (0.68	0.56 0.36	1.357	0.431 0.084	4 1	1.24 1.0 0.91 0.9	09 1.03 (0.90 1.04	1.02 0.86 1.08 0.75	0.60	>10	1.183 NA	4	0.97	1.06					>10	NA NA
IPI00294842 IPI00003479	MAP4K5	KHS1 Erk2	344 20 2422 942	9 0.9	3 0.89	0.83	0.81	0.75 (0.61	0.53	1.933	0.493 NA	10 0	0.97 0.8	87 0.83 C	0.85 0.73	0.72 0.63 1.06 0.72	0.41	3.982	1.419 NA	8 216	1.03	1.29	0.99	0.95 0.96 0.92 0.99 0.95	0.99	0.76	>10	NA NA
IPI00019473 IPI00002857	MAPK11	p38b p38a	445 39 1628 775	6 0.9	1 0.99	1.08	1.04	1.29 1	1.03	0.95 0.75	>10	NA NA	6 0	0.94 0.9	96 0.96 0	0.85 0.82	0.91 0.74 0.93 0.60	0.82	>10	NA 0.653	6	0.99	1.40	0.99	0.99	0.86	0.83	>10	NA NA
IPI00018195 IPI00024672	MAPK3	Erk1 JNK1	1099 229 1693 403	12 0.9	1 1.02	1.06	1.03	1.17 (0.93	0.75	>10	NA NA	12 1		14 1.01 0	0.93 0.97	0.91 0.77	7 0.74	>10	NA NA		0.97	1.05					>10	NA
IPI00303550 IPI00555838	MAPK9	JNK2 MARK2	1429 189 884 65	59 1.0	3 1.05	1.06	1.05	1.06	1.01	0.84 0.78	>10	NA NA	68 1	1.16 1.0	04 1.13 (87 0.94 (0.97 0.96	0.95 0.78 1.00 0.72	0.82	>10	NA NA	37	0.96	1.13	0.94	0.90 0.97 0.91 0.83	0.78	0.71	>10	NA NA
IPI00183118 IPI00010157	MARK3	MARK3	505 36 55 2	9 0.9	0.99	1.06 NA	0.98 NA	1.07 ().92 NA	0.72 0.69 NA NA	>10	NA NA	5 1	1.02 1.0	06 1.00 0 97 0.79	0.94 0.90	0.91 0.84	0.72	>10	NA NA	5	1.02 NA	0.96 NA	0.96 NA	0.83 NA	0.92 NA	0.69 NA	>10	NA NA NA
IPI00412253 IPI00291006	MCCC2		279 9 181 10	3 1.0	3 1.06	1.14	0.99 NA	1.68 ().92 NA	NA NA 1.26 0.96 0.98 NA 0.82 0.70 0.71 0.48	>10	NA NA	5 0	0.92 0.8	82 0.80 03 1.20 1	NA 0.75	NA 0.59	NA 1 0.89	>10	0.071 NA	1	1.10	NA 1.23	1.08	NA 0.68	1.10	NA	>10	NA NA
IPI00006471 IPI00029756	MELK	MELK MER	263 18 153 14	8 1.0	1 0.97	0.99	1.12	1.24 (0.99	0.82 0.70	>10	NA 0.746	7 1	1.13 0.9	99 0.96 1	1.00 0.97	1.08 0.73 0.92 NA	3 0.71	>10	NA NA	4	1.11	NA 1.32	0.98	NA 0.98	0.76	NA 0.82	>10	NA NA
IPI00029730 IPI00063242 IPI00293276	MGC5352	1	44 3 444 134	1 1.0 54 1.0	4 1.34 4 1.06	0.93	1.24	0.98 1	1.14	0.69 0.56 0.85 0.77 1.25 0.80 0.86 0.75 NA NA	>10	0.806 NA	1	NA N.	IA 0.80	NA 0.77	NA 0.58	NA	>10	NA NA	0	NA	NA 0.96	NA 0.90	NA 0.86	NA 0.79	NA 0.67	>10 >10 >10	NA NA
IPI00100630 IPI00294701	MLLT1		108 14 858 55	2 N/ 32 0.9	NA 6 1,00	1.26	0.96	1.50 1	1.00	1.25 0.80 0.86 0.75	>10	NA NA	1 0	0.89 1.1	02 1.06 1 12 0.86 1 92 0.97 0	1.27 NA 0.95 1.01	1.46 NA 0.99 0.83	1.20) >10) >10) >10	NA NA	1 18	0.89	2.21	1.20	0.76 0.89 NA	0.62	0.98	>10	NA NA
IPI00514912 IPI00513678	MSN	FRAP	99 5 726 24	3 2.3	6 1.50	0.93	NA NA	NA 0.79	NA NA	NA NA 0.63 NA	>10	NA NA	2 0	0.95 0.7	78 0.74	NA NA	NA NA NA NA	. NA	>10	NA NA	0	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	>10	NA NA
IPI00306531 IPI00604620	NCK2		347 22 134 7	6 0.9	3 1.06 7 0.97	1.01	0.95	0.93 (0.57	0.47 0.24 NA 0.91 0.94 0.66		0.354 NA	6 0	0.96 0.9	93 0.86 0	0.63 0.47	0.27 0.22	0.22	0.073	0.049 NA	8		1.29 NA	0.93 NA	0.98 NA 0.90	0.82 NA	0.72 NA	>10 >10	NA
IPI00021331 IPI00301609	NEK2	NEK2 NEK9	632 45 2909 272	17 1.0	2 1.08	1.08	1.08	1.18 (0.94	0.94 0.66 0.80 0.68	>10	NA NA	20 1	1.02 0.9 1.09 1.0	99 1.02 0	0.99 1.05	0.81 1.00 1.01 0.82 0.90 0.65	0.76	>10	NA NA	10	0.95	1.24	0.89	0.90	0.84	0.79	>10	NA NA NA
IPI00008237 IPI00375531	NLK	NLK	719 84 104 8	26 0.0	8 1.03	1.01	0.08	1.03	183	0.76 0.48	7.991 >10	1.101 NA	24 1	1.04 1.0 1.03 0.8	04 0.95 1 85 0.92 0	1.00 0.89 0.92 NA	0.99 0.56 0.85 NA	0.36	1.101	0.864	11	1.07	1.21 NA	0.93 NA	0.90 NA	0.87 NA	0.86 NA	>10	NA NA
IPI00026260 IPI00216654	NME2		152 8 118 4	4 1.4 2 0.7	9 1.50	1.21	NA NA	NA NA	NA NA	NA NA NA NA NA NA 1.03 0.77	>10	NA NA	0	NA N.	IA NA 90 0.78 1	NA NA	NA NA 0.60 NA	NA 1.00	>10	NA NA	0	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	>10 >10 >10	NA NA
IPI0021669 IPI00219129	NQO1		462 18 1611 603	13 1.0	1 1.05	1.18	1.06	1.25 1	1.05	1.03 0.77 0.88 0.78	>10	NA NA	16 0	0.97 0.8	88 0.88 0	0.89 0.95	0.88 0.7° 0.99 1.0°	0.77	7 >10 7 >10 8 >10	NA NA	7	0.97 0.88	1.54	1.05	1.02 0.28	0.93	0.86 0.18	>10 >10 0.073	NA 0.043
IPI00219129 IPI00025076 IPI00107753	NTRK1	TRKA	735 51 78 6	23 0.8	6 0.92	1.03	0.94	1.05 (0.88	0.80 0.63	>10	NA	21 0	0.89	87 0.92 0	0.96 0.95	1.08 0.62	0.84	>10	NA	18	1.00 NA	1.00 NA	0.95	0.85	0.87	0.74	>10	NA
IPI00107753 IPI00217223 IPI00014068	PAICS	PAK4	400 19 723 58	11 0.9	7 1.01	0.92	0.90	1.08 (0.86	NA NA 0.83 0.68	~10	NA NA NA	12 1	1.17 1.1 0.97 0.9	79 0.63 0 17 1.03 0 91 0.93 1	0.85 0.84	1.05 0.60 1.19 0.67	0.86	>10 >10 >10 >10	NA NA NA	5	1.10	1.44	1.08	NA 0.88 0.94	0.87	0.79	>10 >10 >10	NA NA NA
IPI00014068 IPI00449049 IPI00553006	PARP1	. 25504	92 5 41 2	3 2.3	9 1.30 NA	0.94 NA	NA 0.61	NA NA	NA 0.67	0.83 0.66 NA NA NA 0.45	>10	NA NA	1	NA N.	IA NA (0.86 NA	1.02 NA NA NA	0.59	>10	NA NA	0	NA NA	NA 1.69	NA	NA 0.85	NA	NA	>10	NA NA
IPI00016610 IPI0000690	PCBP1		375 18 111 4	10 1.1	3 1.03	1.09	0.97	1.19 ().96 NA	NA 0.45 0.97 0.76 NA NA 0.73 0.73 0.89 0.72 0.89 0.79	>10	NA NA	11 1	1.08 0.9	95 0.97 (74 0.99	0.96 0.94 NA NA	1.19 0.62 NA	2 0.91	>10	NA NA	5	0.96 NA	1.36 NA	0.85 NA	0.96 NA	0.87 NA	0.80 NA	>10 >10 >10	NA NA
IPI00306301			235 18 236 13	4 0.9	5 0.99	0.91	0.94	1.13 (0.94	0.73 0.73 0.89 0.73	>10 >10 >10	NA NA NA	6 1	1.18 1.2	74 0.99 28 1.45 0 36 0.93 0	0.88	0.97 0.69 1.11 0.88	0.73	>10	NA NA NA	5	1.12 0.92	1.65 1.02	1.01	0.84 0.97	0.91	0.78 0.79	>10 >10 >10	NA NA
IPI00003925 IPI00298423 IPI00002538	PDHX	PDK1	278 20 661 52	7 0.9	1.05	1.03	1.11	1.08 (0.95	0.89 0.79	>10 >10 >10	NA	6 1	1.05 0.9 0.98 1.0	99 0.99 1	1.00 0.97	0.98 0.73	0.80	>10	NA		1.01	1.02 1.29 1.02	0.94	0.85	0.84	0.79	>10	NA
IPI00002538 IPI00018235 IPI00216691	PEF1	FUNI	52 2 120 2	0 N/	NA NA	NA 2.67	NA NA	NA NA	NA NA	NA NA	>10 >10 >10	NA NA NA	1 0	180 08	83 0.81	NA NA	0.97 0.78 NA NA	NΔ	>10	NA NA NA	0	NA NA	NA NA	NA NA	0.90 NA	NA NA	NA NA	>10 >10 >10	NA NA NA
IPI00216691 IPI00169383 IPI00017334	PGK1		97 4 316 16	1 8.1	9 1.01	0.95	NA NA	NA NA	NA NA	0.90 0.76 NA NA NA NA NA NA NA NA NA NA	>10	NA	2 0	0.93 0.9	93 0.78 91 0.56 84 0.84 (NA NA	NA NA	NA NA	>10	NA NA NA	1	1.24 1.02	NA NA 1.30	1.60	NA NA NA 1.11	1.29	NA NA	>10 >10 >10	NA NA NA
IPI00017334 IPI00027252			316 16 433 19	7 1.3 9 0.9	1.21 3 1.08	1.08	1.14	1.05	0.93	0.84 0.87 0.89 0.73	>10 >10	NA NA	7 C	1.07 0.9	84 0.84 0 90 0.91 0	0.84 1.02 0.87 0.97	0.97 0.64	2 1.05	>10 >10	NA NA	5 7	1.02	1.30	1.08	1.11 0.85	0.86	0.80	>10 >10	NA NA

							bosutini	b							dasatir	nib								imatinib			
IPI acc. no.	Protein	Kinase	highest	highest	highest SSM	kinobeads bindir	g relative to ve	hicle at		[cpd] causing 50% binding	[cpd] at	highest SSM	kinot	peads binding	relative to	vehicle at		[cpd] causing 50% binding	[cpd] at inflection	highest SSM used for		kinobead	s binding i	relative to vehicle at		[cpd] causing 50% binding	[cpd] at inflection
IPI acc. no.	Protein	Kinase	Mascot score	SSM	used for quantification 0.0001 0.	01 0.01 0.03 V uM uM	3 0.1 0. uM u	.33 M	I.0 10 aM uM	reduction (uM)	of curve (uM)			0.01 0.033 uM uM	0.1 uM	0.33 1.0 uM uM	10 I uM	reduction (uM)	point of curve (uM)	quantification	0.01 uM	0.033 uM	0.1 uM	0.33 1.0 uM uM	10 uM	reduction (uM)	point of curve (uM)
IPI00011200 I		PIM1	312 56	7 2	6 1.26 1 1 NA	03 0.98 NA A 1.46 NA	NA N	IA I	NA NA	>10 >10	NA NA	5 1.15 1 NA		0.82 1.23 NA NA	NA	1.24 NA NA NA	0.80 NA	>10 >10	NA NA	0	NA NA	NA NA	NA NA	NA NA	NA NA	>10 >10	NA NA
IPI00009688 IPI00216470	PIP5K2B	PIP5K2A PIP5K2B	46 57	6	1 1.11 1 1 NA 1	08 1.03 0.95 A 0.99 NA	1.06 0. 1.53 N	.83 0 IA 0	.78 0.56 .73 NA	>10 >10	0.919 NA	1 NA	NA (0.84 NA	1.09	NA NA NA 0.68	NA B NA	>10 >10	NA NA	1 0	NA NA	2.30 NA	NA NA	0.70 NA NA NA	0.38 NA	0.518 >10	NA NA
IPI00152303 IPI00220644 IPI	PIP5K2C PKM2	PIP5K2C	67 179	6	4 151 1	34 1.36 0.85 18 1.17 NA	NA N	IA I	NA NA	>10 >10	NA NA	5 1.00	0.98	0.85 NA	NA	1.12 0.96 NA NA	NA.	>10	NA NA	0	NA NA	NA NA	NA	NA NA	NA	>10 >10	NA NA
IPI00384765 I IPI00412672 I IPI00413780 I	PKN1	PKN1 PKN3	1054 139 150	12	40 1.02 0 5 1.00 0	95 1.10 1.10 91 1.17 1.00	1.08 0.	.79 0 .10 0	.58 0.36	1.289 >10	0.536 NA NA	34 1.08 4 0.98	1.03 (0.98 1.03 1.09 NA	1.05	0.95 0.58 NA 0.74	8 0.42 4 NA 0.96	1.384 >10	0.703 NA NA	22 3	1.00	0.89	1.07	0.90 0.91 0.99 0.96	0.74	>10	NA NA
IPI00413780 I IPI00410344 I	PLK4	PLK4	150 181	10	4 1.03 1 4 1.01 1	05 1.12 0.87 01 1.15 1.08 A 1.13 NA	1.21 1.	.11 0	NA U.63 .97 0.77	>10 >10 >10	NA NA	4 1.03	1.17 (0.92 0.95 0.98 NA 1.05 NA	1.06 NA	NA 0.77	7 NA NA	>10 >10 >10	NA NA	3	0.91 0.93 1.03	1.19	1.04	0.98 0.89 1.16 0.92 0.73 0.89	0.63	>10 >10 >10	1.298 NA NA
IPI00455547			143	10	1 0.78 1	15 0 68 NA	NA N	JA I	JA NA	>10	NA NA	0 NA 10 1.21	NA 0.97	NA NA 1.09 1.39	NA 1.13	NA NA 1.64 0.72	NA 2 0.79	>10	NA NA	0	NA 0.97					>10	NA NA
IPI00008380 IPI00419307 IPI	PPP2CA PPP2R1A		343 216 310	19	1 1.07 1 5 1.06 1	23 1.12 1.20 18 1.00 0.80 00 1.02 0.98 27 1.23 NA	0.64 0. 0.93 1.	.36 0 .01 0	.38 0.48 .83 0.72	0.177 >10	0.042 NA	3 1.16 4 1.08	1.29	1.24 NA 0.96 0.76	NA 0.78	NA NA 1.64 0.72 NA NA 1.01 0.53	NA 3 0.47	>10 6.010	NA 0.582	2	1.02	NA 1.08	1.17 1.16	0.75 0.78 NA 0.74 1.18 0.76 0.85 0.99	NA 1.30	>10 >10	NA NA NA
	PPP2R2D		132 86 357	8 7	2 0.96 0	90 0.83 NA	NA N	IA I	NA NA	>10 >10	NA NA	2 NA 1 0.75	0.75 (0.98 NA 0.59 NA	0.81 NA	NA NA	NA NA	>10	NA NA	3	1.14 1.08	NA	1.18	NA 0.80	NA	>10 >10	NA
IPI00011937	PRDX1 PRDX4 PRDX6		357 103 252	6	8 1.53 1 3 0.71 1	28 1.12 1.14 32 1.07 NA 19 1.12 1.02	1.22 0. NA N	.85 C	.97 0.93 NA NA	>10 >10 >10	NA NA NA	10 1.06 2 0.76	0.65	1.00 0.95 0.85 NA 0.87 1.15	0.83	1.12 0.68 NA 0.75 1.15 0.67	5 0.70 5 NA	>10 >10 >10	NA NA NA	1	0.89 NA 0.96	1.11	0.88 NA	0.88 0.83 0.98 NA 0.82 0.80 0.95 0.89	0.78	>10 >10 >10	NA NA
IPI00220301 IPI00410287 IPI00220409	PRKAA1	AMPKa1	1943 720	213	132 1.02 1	01 1.08 1.02	1.11 0	.93 I C	.83 0.59	>10 >10 >10	1.060 NA	147 1.06	1.01 1	1.04 1.12 0.99 0.85	0.88	1.07 0.72	2 0.83	>10 >10 >10	NA NA	71	1.08	1.22	0.97	0.95 0.89	0.80	>10 >10 >10	NA NA NA
	PRKAB2		482 1831	39	7 0.73 1 106 0.96 0	94 1.12 1.01 03 1.01 1.10 99 1.10 1.03	0.93 0.	.85 C	.84 0.54 .88 0.61	>10	2.235 NA	10 1.00 81 1.04	0.94	1.01 0.91 0.96 1.01	1.12 0.97	0.86 0.83	3 0.86 B 0.78	>10 >10 >10	NA NA	5 52	1.11	0.78	0.96	0.92 0.96 0.76 0.93 0.93 0.88	0.78	>10	NA NA
	PRKCA	PKCa	609 675	62	8 1 10 1	04 0.96 1.06 35 0.97 0.96 78 0.99 1.02	0.88 1	05 0	60 0.68	>10 >10	NA NA	10 1 29	1 10	1.14 0.92 0.94 0.86 0.99 1.13	0.96	0.97 0.74	4 0.83 6 0.64	>10 >10	NA NA	3	1.23	1.08	0.83	0.95 0.68 0.85 1.02 0.94 0.86	0.88	>10 >10	NA NA
	PRKCD	PKCb PKCd	1167 300	236 23	63 0.76 0 4 0.56 0	78 0.99 1.02 32 1.13 0.84 A NA NA	1.14 0. 1.09 0.	.93 0	.92 0.80 .88 0.66	>10 >10	NA 0.009	5 0.86	0.77	0.80	0.92	0.87 0.62	0.88	>10 >10	NA NA	26 4	1.00 1.38	1.15 0.97	0.92 0.83	0.94 0.86 1.23 0.79 1.73 0.79	0.79 0.69	>10 >10	NA NA
IPI00329236 I		PKCt PKD2	300 486	43	12 0.87 0	95 0.98 1.04	1 1 1 3 0	92 0	84 0.49	>10 7.913	NA 1.565	15 0.93	0.89	NA NA 1.01 0.95	0.95	1.01 0.76	NA 6 0.68 4 0.59	>10 >10	NA NA	10	1.38	1.14	1.15	0.93 0.93	0.84	>10 >10	NA NA
IPI00296337		DNAPK	283 5464 77	182	142 1.06 1 1 1.69 1	93 1.10 1.20 92 1.03 0.98 18 0.97 NA	1.20 1. 1.02 0.	.84 C	.78 0.64	>10 >10 >10	NA NA NA	3 1.17 133 1.07	1.03 (1.19 1.38 0.99 0.96 0.25 NA	0.99	0.94 0.70	0.59 0 0.83	>10 >10 0.003	1.738 NA NA	32	1.19 1.03 NA	1.32	0.92	0.74 0.77 0.97 0.84	0.77	>10 >10 >10	NA NA NA
	PSME2		62 201	6	5 101 0	18 0.97 NA A 1.07 1.24 96 1.14 1.40	1 13 0	95 0	70 0.40	>10	NA 0.776	0 NA	NA	NA NA	NA	NA NA NA 0.37	NA.	>10	NA 0.310	0	NA 1.00	NA 1.27	NA 0.91	NA NA NA NA 0.96 0.90	NA 0.75	>10 >10 >10	NA NA
IPI00183626 IPI00413961 IPI	PTBP1 PTK2	FAK	242 3025	5 346	3 1.58 1 147 1.00 0	25 1.07 NA 98 1.06 0.98	NA N 1.10 0.	90 C	NA NA .74 0.42	>10 3.187	NA 1.079	3 1.19 141 1.07	0.97 (0.78 NA 0.99 1.02	NA 0.91	NA NA 1.05 0.76	NA 6 0.75	>10 >10	NA NA	0	NA 1.04	NA 1.11	1.00	NA NA 0.89 0.86	0.73	>10 >10	NA NA
IPI00015550	PTK2B PTMA	PYK2	2672 118	6	108 0.96 0	95 1.02 0.97	1.02 0.	.89 0	.75 0.45	4.500 0.670	1.216 NA NA	95 1.02 0 NA	0.92 (NA	0.96 0.94 NA NA	0.94 NA	0.96 0.72 NA NA	2 0.73 NA	>10 >10	NA NA NA	72 0	NA	1.13	0.98	0.93 0.85	0.77	>10 >10 >10	NA NA NA
	RANBP5		101 175	7	2 1.38 1 3 0.94 0	A NA 1.04 13 1.03 NA 75 0.86 0.73	NA N 1.00 0.	72 0	NA NA .78 0.45	>10 >10	1.378	3 1.16 2 1.27	0.99 (1.03 (0.80 NA 0.76 1.03	NA 0.83	NA NA NA NA 1.50 0.34	NA 4 0.70	>10 >10	0.616	0	NA 0.82	0.95	1.17	0.76 0.68	0.72	>10	NA
	RCC2 RGPD1 RIPK2	RIPK2	211 131 1711	12	2 0.99 1	38 1.12 1.26 01 0.98 NA	NA N	IA I	.05 1.03 NA NA	>10 >10 >10	NA NA	2 0.92	0.88 (1.02 0.98 0.92 1.24	1.24 NA	1.05 NA	0.82	>10 >10 0.322	NA NA	0	0.83 NA 1.12	NA	0.94 NA 1.00	NA 0.86 NA NA 0.98 0.91	NA NA 0.79	>10 >10	NA NA
IPI00397801		RIFNZ	99	1	0 NA 1	02 1.04 1.05 A NA NA 07 0.96 0.96 99 1.03 1.00	NA N	.99 U IA I	NA NA	>10 >10 8.474	NA NA 0.968	125 1.09 1 NA 5 0.83	NA 1	1.63 NA	0.26	NA 0.22 0.84 0.67	2 NA 7 0.57	0.055 >10	0.092 NA 0.548	0	NA 0.81	NA	NA	NA NA	NA	>10 >10 >10	NA NA NA
IPI00477982		RSK3 RSK1	1925 488	178	1 0.68 0	35 0.96 NA	0.91 N	IA U	.80 NA	>10 >10	NA NA	2 1.17	0.97	0.92 1.02 0.97 0.93 1.23 NA	0.94	0.98 0.67 NA 0.50	7 0.79 0 NA	>10 >10	NA 0.132	31	1.02 0.87	1.12	0.87	0.73 0.86 0.96 0.83 1.16 0.73	0.79 1.02	>10	NA NA
IPI00020898 IPI00328396	S100A7	RSK2	1066 48	25	8 0.92 0 0 NA 1	99 1.10 0.94 A NA NA A 1.10 NA	1.25 0. NA N	.96 0	.96 0.44 NA NA	5.583 >10	2.386 NA	11 1.02 8 NA	0.97 (0.96 1.09 NA NA	0.92 NA	0.94 0.69 NA NA	9 0.75 NA	>10 >10	NA NA	7	1.10 NA	1.31 9.18	0.98 NA	1.04 0.80 NA NA	0.77	>10 1.969	NA NA
IPI00185526 S IPI00373937 S	SAMSN1 SBSN SDHA		41 66	3	1 NA 1	A 1.10 NA A NA NA	1.16 N NA N	IA C	.95 NA NA NA	>10 >10	NA NA	1 1.15	0.96	NA 0.74 1.43 NA	NA	NA NA	0.61 NA	>10 >10	NA NA	0	1.12 NA NA	NA NA	1.14 NA	NA 0.72 NA NA 0.86 NA	NA NA	>10 >10	NA NA
IPI00375370	SEC13L1 SEC61A1		42 194 322	6	4 1.13 1	A NA NA A 0.47 NA 27 1.02 1.08 98 0.91 0.88	1.32 P	01 0	.95 0.62	0.496 >10 >10	NA NA NA	5 0.96	0.88 1	1.86 0.77	1.29	NA NA 1.00 1.38 0.97 0.71	0.73	>10 >10 >10	NA NA NA	2	0.97 NA	1.06 1.50	1.00	0.86 NA 0.84 0.95 0.79 NA	0.64	>10 >10 >10	NA NA NA
IPI00410693 S IPI00027444 S	SERBP1		108	2	0 NA 1	A NA NA A NA 1.19	NA N	IA I	NA NA	>10	NA NA	1 0.83	0.80	0.80 NA	NA	NA NA	NA.	>10 >10 >10	NA NA	0	NA NA	NA	NA	NA NA	NA	>10	NA NA
IPI00022204 S IPI00032134 S	SERPINB3		163 52	11 10	0 NA 1	A NA NA A NA NA 02 0.93 NA	NA N	IA I	NA NA	>10 >10	NA NA	9 NA 1 NA	NA NA 1	NA NA 1.19 NA	NA 0.65	NA NA NA 0.50	NA NA	>10 >10	NA NA NA	0	NA 1.27	NA NA		NA NA NA NA NA 1.34	NA	>10 >10	NA NA NA
IPI00072377 S			138 219	7	4 153 1	10 118 NA	NA N	IA I	JA NA	>10 >10	NA NA	2 0.80 4 0.60	0.64 (0.83 NA 0.75 NA	0.79	NA 0.46		>10 >10	0.063	0	NA 0.83	NA 1.44	NA 0.60	0.84 0.57	NA 0.80	>10 >10	0.060
	SFPQ SFRS3 SHC1		215 118	4	4 0.90 0 2 0.87 0	39 0.85 0.91 72 0.70 NA	NA 0.	90 I	NA NA	>10 >10 0.185	2.945 NA	3 1.02	0.83 (0.46 NA	NA	1.01 NA NA NA	0.82 NA 5 0.12	>10 0.003 0.077	0.019 NA	6	1.04 NA 1.09	0.92 NA	0.78 NA	0.86 0.79 NA NA	0.66 NA	>10 >10	NA NA
IPI00069750 S	SIAHBP1 SIMII AR TO		392 59 66	1	1 0.95 1 0 NA	04 1.02 0.8° 07 0.96 NA A NA NA	NA N	A I	NA NA	0.185 >10 >10	0.045 NA NA			0.76 0.43 NA NA NA NA			NIA	- 40	0.078 NA NA	0	NA NA	NA NA	0.85 NA NA	0.77 0.56 NA NA NA NA	NA NA	>10 >10 >10	0.154 NA NA NA
IPI00066346	SIMILAR TO SIMILAR TO		61 721	12	2 NA 1	07 0.96 NA A NA NA A 1.02 NA A NA NA	1.09 N	IA C	.73 NA NA NA	>10 >10 >10	NA NA	0 NA 11 0.91	NA 0.85	NA NA 0.69 1.10	NA 0.77	NA NA NA NA 1.08 0.55	NA 5 0.88	>10 >10 >10	NA 1.696	0	NA 1.13	NA NA	NA 0.68	NA NA NA NA NA NA NA 1.06	NA NA	>10 >10 >10	NA NA
IPI00174920 S IPI00398985 S	SIMILAR TO SIMILAR TO FATT	Y	99 58	10 4	1 1.88 1	75 1.91 NA	1.00 P	IA U	.60 NA	>10 >10	NA NA	1 NA	NA 1	1.59 NA	1.27	NA 0.98	NA NA	>10	NA NA	0	NA NA	NA	NA	NA NA	NA NA	>10 >10	NA NA
IPI00020557	SIMILAR TO SIMILAR TO		47 49	3	1 NA 1	15 0.62 NA A 0.73 NA A NA NA	1.04 N	IA C	.73 NA NA NA	>10 >10	NA NA	0 NA 0 NA	NA NA	NA NA NA NA NA NA	NA NA	NA NA	NA NA	>10 >10	NA NA	0	NA 1.16	NA	NA NA 0.94	NA 0.85	NA NA	>10 >10	NA NA
IPI00007188	SLC25A3 SLC25A5 SLC3A2		426 493	17	11 1.02 1 11 0.95 0	08 1.25 0.90 04 1.22 1.07	1.07 0.	.80 0 .92 0	.80 0.68 .82 0.69	>10 >10 >10	NA NA	10 1.02 12 1.04	0.89 (0.82 0.87 0.83 0.99	0.92	0.92 0.62 0.98 0.67		>10 >10 >10	NA NA NA	8	0.92	1.02 1.37		0.93 0.89 0.92 0.83	0.78	>10 >10 >10	NA NA
IPI00008986 S	SLC7A5 SLK	SIK	368 399	10	8 1.12 1	22 1.52 NA 30 0.87 1.10 91 0.96 0.88	NA 0.	81 I	NA 0.77	>10 >10 0.383	NA NA 0.301	7 0.96	0.95 (NA NA 0.79 NA	NA NA	NA NA NA NA 0.91 0.96	NA NA NA	>10 >10 >10	NA NA NA	0	NA NA 0.82	NA NA	NA NA 0.77	NA NA NA NA 0.84 0.61	NA	>10 >10 >10	NA NA NA
IPI00023011	SMR3B SNF1LK2	QIK	80 734	19	6 0.85 0	50 0.86 NA 97 0.96 0.83	3.19 N	IA 0	.44 NA	>10 0.281	0.301 NA 0.175	0 NA	NA	NA NA 0.90 0.73	NA	NA NA 0.34 0.34	NA.	>10	NA 0.082	0	NA 1.09	NA	NA 0.95	NA NA	NA	>10 >10 >10	NA NA
	SPR SRC	SRC	265 1621	13 162	5 0.97 0 52 0.86 0	93 1.38 0.95 95 0.97 0.75	1.20 1. 0.80 0.	.00 1	.01 0.69 .42 0.19	>10 0.400	NA	6 1.38 49 1.00	1.69 1 0.95 0	1.03 0.93 0.84 0.63	0.98	0.96 0.72 0.28 0.25	2 0.81 5 0.20	>10 0.062	NA 0.039	5 37	1.03	1.36	0.99	0.91 0.81 0.90 0.90	0.71	>10 >10	NA
IPI00013894	SSB STIP1		71 46	5	2 0.92 1	09 1.20 NA A NA NA 99 1.07 1.02	NA N	IA I	NA NA	>10 >10	0.299 NA NA	1 0.69	0.68	NA NA 0.74 NA	NA	NA NA	NA.	>10	NA NA	0	NA NA	NA NA	NA	NA NA	NA	>10 >10	NA NA NA
IPI00477195	STK16 STOML2	MPSK1	168 71	5	4 0.91 0 1 NA 1	99 1.07 1.02 A NA NA	1.17 0. NA N	.94 0	.90 0.80 NA NA	>10 >10	NA NA	5 1.00 2 0.81	0.98 0	0.96 0.67 0.56 1.13	0.97 NA	0.75 0.65 1.18 NA	0.63	>10 >10	NA 0.018	2	1.01 0.98	0.73 1.76	1.23 0.93	1.02 0.90 1.28 1.07	0.74	>10 >10	NA NA
IPI00221222	STS-1 SUB1		1348 250	9	44 1.01 0 7 0.91 0	A NA NA 95 1.05 0.78 31 0.97 1.00	0.69 0. 1.22 1.	.49 0 .21 1	.14 0.68	0.303 >10	0.166 NA NA	6 0.82	0.76 (0.86 0.61 0.93 1.24	0.47	1.28 0.55		0.086 >10	0.052 NA	41	0.98 1.31	1.10 1.24	0.82 1.20	0.75 0.62 1.41 0.97	0.46	4.129 >10	0.313 NA NA
IPI00005737	SUB1P1 SURF4 SYK	SYK	53 237 1163	6	5 0.85 0	A 1.07 NA 34 1.15 NA 02 1.05 1.01	1.00 N	IA 0	.62 NA .65 0.39	>10 >10 2.125	NA NA 0.745	6 1.01 33 1.02	0.66	NA NA 1.06 0.87 0.97 0.92	0.52 0.76	1.05 0.47	NA 7 0.63 9 0.42	>10 >10 1 417	NA 0.511 0.223	0	0.87 NA 1.05	NA	0.75 NA 1.02	NA 0.87 NA NA 0.87 0.85	NA	>10 >10 >10	NA NA NA
IPI00299166	TANK TAOK1	TAO1	959 198	58	1 105 0	32 1.11 0.99	1.05 0.	80 0	94 0.58	5.336	1.144	25 0.89 1 1.38	0.85 (0.91 1.02 1.45 NA	0.91	1.03 0.76	6 0.84	>10	NA NA	20	0.98	1.32 NA	0.90	0.91 0.76 NA 0.96	0.80 NA	>10	NA NA
IPI00465168 IPI00410485	TAOK2 TAOK3	TAO2 TAO3	224 221	18 18	2 1.09 1 6 1.01 1	15 1.26 1.07 04 1.09 1.04 93 1.02 0.99	1.24 0. 1.30 1.	80 1	.11 0.70	>10 >10 >10	NA NA	5 0.89 4 NA 189 1.02	0.88 (NA	0.76 1.18 1.18 1.11	NA 1.41	1.06 NA 1.41 0.76	0.85	>10	NA 1.031	3	0.98	1.29	0.78	0.72 0.72 0.92 0.86 0.89 0.86	0.68	>10	NA NA NA
IPI00293613 IPI00006064	TBK1	TBK1	3346 931	334	213 0.93 0 23 0.89 0	93 1.02 0.99 96 1.16 0.91	1.00 0. 1.04 0.	.94 0 .85 0	.76 0.41 .68 0.41	2.629 2.628	1.259 0.878	189 1.02 18 0.79	0.96 0	0.98 1.01 0.90 0.83	0.96	1.01 0.74 0.83 0.71	4 0.80 1 0.65	>10 >10	NA NA	133 17	1.06 0.99	1.06	0.95 1.03	0.89 0.86 0.97 0.85	0.70	>10 >10 >10	NA NA

										bos	utinib									•	dasatir	nib									imatin	nib			
			highest	highest	highest SSM			kinobea	ds binding	relativ	to vehicle	at		[cpd] causing 50% binding	[cpd] at	highest SSM		ki	inobeads	binding	relative to	vehicle	at	[cpd] ca 50% bii		d] at	highest SSM		kinobea	ds binding	relative to	vehicle at		[cpd] causing	[cpd] at inflection
IPI acc. no.	Protein	Kinase	Mascot score	SSM	used for quantification	0.000°	0.001 uM	0.01 uM		0.1 uM	0.33 uM	1.0 uM	10 uM	reduction (uM)	inflection point of curve (uM)	used for quantification	0.0001 uM	0.001 uM	0.01 uM	0.033 uM	0.1 uM	0.33 uM		o reduc	on poi	nt of (uM)	used for quantification	0.01 uM	0.033 uM	0.1 uM	0.33 uM	1.0 uM	10 uM	50% binding reduction (uM)	point of curve (uM)
IPI00000878	TEC	TEC	2469	213	126	0.99	0.98	1.00	0.95	0.98	0.80	0.63	0.46	2.964	0.567	103	1.06	0.98	0.96	0.69	0.52	0.38	0.24	21 0.11	5 0.	060	88	1.01	1.07	0.93	0.87	0.80	0.70	>10	NA
IPI00102677	TESK2	TESK2	309			0.99		1.01		1.06			0.90	>10	NA	5	0.93	0.92	0.98	0.88	0.80	0.65		30 0.58		348	7	0.95	1.25	0.94	0.84	0.92	0.73	>10	NA
IPI00294619	TFG		405			1.07		0.87		NA		NA		>10	NA	2	0.86		0.75	NA	NA	NA		IA >10		IA.	0	NA	NA	NA	NA	NA	NA	>10	NA
IPI00005733	TGFBR1	TGFbR1	522 87		13	0.96		1.01		1.07		0.91	0.67	>10	NA		0.96	0.98	0.91	1.06	0.93	0.92		69 >10		IA.	7	1.04	1.13	0.96	0.92	0.94	0.73	>10	NA
IPI00164934 IPI00328840	TGFBR2 THOC4	TGFbR2	101		3	0.96		0.88	NA NA	NA NA		NA NA	NA NA	>10	NA NA	2	0.87	0.68	0.90	NA NA	NA 0.79	NA NA		IA >10		IA IA	0	NA 1.50	NA 1.78	NA 1.07	NA 1.14	NA 1 14	NA 0.75	>10 >10	NA NA
IPI00326640	TKT	 	119		1	1.20		1.27		NA NA	NA NA	NA NA	NA NA	>10	NA NA	- 4	0.77	0.60	0.93	NA NA	NA NA	NA		IA >10		IA	0	NA NA	NA	NA	NA	NA	NA	>10	NA NA
IPI00021710	TNIK	ZC2 TNIK	243		4	0.92		0.89		NA.	0.48	NA	0.25	0.268	0.144		1.01	0.96	1.02	0.91	1.02	0.57		38 >10		250	2	0.99	1.36	1.01	1.05	0.81	0.70	>10	NA NA
IPI00022633	TNK1	TNK1	713			1.13		1.05		1.04			0.76	>10	NA		1.06	1.07	0.96	0.84	0.91	0.84		66 >10		IA.	13	1.04	1.17	1.04	0.96	0.81	0.78	>10	NA
IPI00442025	TNK2	ACK	530		15	1.08	1.14	1.05		0.99		0.51	0.32	0.863	0.316	18	1.22	1.16	0.98	0.87	0.76	0.58		35 0.47		172	12	1.01	1.16	0.95	1.01	0.82	0.76	>10	NA
IPI00465028	TPI1		131			1.38			0.97	NA			0.43	0.569	0.211		0.81	0.58	1.06	NA	1.15	NA		IA >10		004	1	0.81	NA	1.08	NA	0.92	NA	>10	NA
IPI00292635	TRAF2		397		11	0.90			1.04	1.09			0.45	3.000	1.190	14	0.92	0.87	1.00	0.86	1.02	1.01		72 >10		IA.	7	1.00	1.99	0.96	0.87	0.74	0.79	>10	NA
IPI00395631	TRAF7 TRIM59	1	99 346		1	NA	NA	0.97		1.17		0.63		>10	NA NA	1	NA 1 11	NA	0.95	1.22	1.09	1.01		94 >10 IA >10		IA IA	1	NA	1.60	NA 1.28	0.92	NA 0.99	0.84	>10 >10	NA NA
IPI00432462 IPI00179709	TUBA2	1	1060			1.37 NA		1.15 NA		1.52 NA		1.05 NA	0.72 NA	>10	NA NA	6	1.11 NA	0.94 NA	1.02 NA	NA NA	1.39 NA	NA NA		IA >10		IA IA	3	0.77	0.98 NA	0.66	0.93 NA	0.99	0.84 NA	>10	NA NA
IPI00179709	TUBA2 TUBA6	1	1481			1.08		1 13		1 1 1 2			0.70	>10	NA NA	73	1.06	0.92	1.02	0.84	1.04	0.92		67 >10		IA	38	1.06	1.09	1.00	0.88	0.81	0.75	>10	NA NA
IPI000011654	TUBB		1668			0.90			1.10	1.18			0.75	>10	NA.		1.05	1.06	1.01	1.12	0.97	1.24		89 >10		IA	12	1.07	1.15	0.90	0.89	0.03	0.70	>10	NA NA
IPI00013475	TUBB2A		1016	78	0	NA		NA		NA		NA		>10	NA.	1	1.11	1.09	0.97	NA	NA	NA		IA >10		IA.	1	1.17	NA	0.80	NA	0.64	NA	>10	NA
IPI00655896	TUBB4		1488	102	15	1.07	1.08	1.12	1.09	0.90	0.99	0.75	0.68	>10	NA	12	0.87	0.77	0.93	0.78	1.03	0.77	0.67	51 >10	1.	043	9	0.94	1.29	0.94	1.09	0.74	0.85	>10	NA
IPI00027107	TUFM		131		3	0.95			NA	NA	NA	NA		>10	NA	3	0.74	0.77	0.73	NA	NA	NA		IA >10		IA.	0	NA	NA	NA	NA	NA	NA	>10	NA
IPI00470779	TXLNA		107		0	NA		NA		NA		NA		>10	NA	2	0.78	0.73		NA	NA	NA		IA >10		IA.	1	1.55	NA	1.09	NA	0.99	NA	>10	NA
IPI00216298	TXN		61		2	NA	NA	1.27		1.32		1.51		>10	NA	0	NA	NA	NA	NA	NA	NA		IA >10		IA.	0	NA	NA	NA	NA	NA	NA	>10	NA
IPI00395887	TXNDC	Times	124		2	0.89		1.45		1.40			0.76	>10	NA NA	4	NA	NA	0.88	0.87	0.95	0.95		72 >10 50 >10		IA 835	2	1.08	1.46	0.98	0.99	0.76	0.75	>10 >10	NA
IPI00022353 IPI00328348	TYK2 UBA52	TYK2	1787			0.96 NA		0.98		0.77		0.80	0.70 NA	>10	NA NA	63	1.08 NA	1.02 NA	0.99 NA	0.90 NA	0.88 NA	0.90 NA		50 >10 IA >10		835 IA	38	0.96	1.18 NA	0.99	0.95 NA	0.86	0.79 NA	>10	NA NA
IPI00326346	ULK3	ULK3	933			0.96			1.10	1.09			0.58	>10	0.842	22	0.98	0.94	1.74	0.82	1.09	0.95		68 >10		IA	14	1.07	1.05	1.08	0.92	0.78	0.75	>10	NA NA
IPI00640597	VARSL	OLKS	100		1	1.34		1.36		NA.		NA		>10	NA NA	1	1.67	0.94	0.50	NA	NA.	NA		IA >10		IA	1	NA.	0.87	NA	0.69	NA	0.64	>10	NA NA
IPI00478540	VCP		105		. 2	0.88		1.41		1.43		1.05		>10	NA NA	1	0.96	0.92	0.72	NA	NA	NA		IA >10		IA.	1	0.87	3.05	0.77	1.06	0.94	0.61	>10	NA NA
IPI00418471	VIM		154		4	0.84	0.76		NA	NA		NA		>10	NA	2	0.79	0.61	0.98	NA	0.96	NA		IA >10		IA.	2	0.43	1.29	0.52	1.07	0.49	0.49	>10	0.013
IPI00006754	WDR68		222	7	3	0.84	0.74	1.60	NA.	1.63		0.98	NA	>10	NA	2	0.93	0.98	1.13	0.81	1.25	1.35	0.92	72 >10	1	IA.	1	0.98	NA	0.80	NA	0.82	NA	>10	NA
IPI00025830	WEE1	Wee1	1415			0.93		1.02		1.08		0.74		3.471	1.027		1.00	1.00	0.95	0.97	0.87	0.94		53 >10		727	33	1.06	1.26	1.04	0.95	0.84	0.76	>10	NA
IPI00298961	XPO1		476	22		1.04		1.02		NA	NA	NA	NA	>10	NA		1.08	0.99	0.93	NA	NA	NA		IA >10		IA.	1	NA	1.76	NA	0.71	NA	1.03	>10	NA
IPI00640703	XPO5		275			1.11		1.91		1.27		0.90		>10	NA		1.25	1.21		1.18	1.00	1.29		67 >10		594	1	NA	0.69	NA	0.96	NA	0.74	>10	NA
IPI00302458	XPO7 XPOT		165 198		5	1.11		0.84		NA		NA		>10	NA		1.06	0.90	1.00	NA	NA	NA		IA >10		IA.	0	NA	NA	NA	NA	NA	NA	>10 >10	NA
IPI00306290 IPI00013981	YES1	YES	1803		3	0.82		0.90	0.72	NA 0.85	0.94	NA 0.40	1.06 0.29	>10	NA 0.404	73	0.86	0.74	0.78	1.25 0.67	NA 0.51	0.35		64 >10 18 0.10		IA 087	50	NA 1.07	NA 1.45	NA 0.98	NA 0.90	NA 0.87	0.75	>10	NA NA
IPI00013961	YWHAB	TES	422			0.90		1.14		NA		NA	0.29	1.447	0.774		0.90	1.50	0.02	NA	0.51	NA		IA 0.26		153	1	0.82	NA	1.04	NA	0.80	NA	>10	NA NA
IPI00000816	YWHAE		646			0.93			0.72	0.73			0.31	0.286	0.109		0.87	0.73	0.79	0.65	0.53	0.61		37 0.43		152	16	1.03	1.09	0.88	0.77	0.61	0.47	4.174	0.299
IPI00220642	YWHAG		895			0.95			0.82		0.51		0.33	0.341	0.120		0.89	0.85		0.68	0.59	0.52		29 0.31		182	9	0.98	1.06	0.82	0.66	0.56	0.43	1.519	0.218
IPI00216319	YWHAH		499	30	7	1.17		0.92		0.80		0.41		0.467	0.293		0.92	0.98	0.83	0.50	0.41	0.29		16 0.04	6 0.	029	3	0.94	0.95	0.77	0.54	0.56	0.33	0.890	0.207
IPI00018146	YWHAQ		399			0.89		1.08		0.84			0.14	0.617	1.238		1.06	0.62	0.62	0.71	0.69	0.69		35 0.69		130	2	1.14	1.10	0.89	0.69	0.62	0.50	>10	0.231
IPI00180776	YWHAZ		733			1.00		1.05		0.77		0.49		0.672	0.144		0.82	0.78	0.83	0.63	0.60	0.57		32 0.53		501	11	1.15	1.17	0.95	0.73	0.67	0.46	3.932	0.463
IPI00329638	ZAK	ZAK	948	149	42	0.92	0.93	1.12	1.00	1.05	0.84	0.55	0.36	1.164	0.610	36	1.07	1.03	1.00	0.81	0.82	0.60	0.38	25 0.55	3 0.	271	28	1.03	1.05	0.97	0.89	0.84	0.71	>10	NA
A 1 Pr 11		0001						1		1																									
	es with confidence > MARK4	90% MARK4	197	12		NA	NIA	NA	4.00	NIA	1 18	NIA	0.50	. 40	NA.		0.97	1.52	4.47	1.03	NIA	1.07	NIA C	C4 . 44		IA.	2	NIA	0.04	NIA	4.45	NIA	0.00	>10	NA
IPI00064797 IPI00556369	BOLA2	SMG1	197		1	NA NA	NA NA	0.94		1.02		NA 0.77	0.59	>10	0.836		1.04	0.85	1.17	0.67	0.90	0.86		61 >10		IA	2	NA NA	1.02	NA NA	1.15	NA NA	0.69	>10	NA NA
IPI00036369	MAPK6	Frk3	165		1	NA NA		NA		NA		NA		>10	NA NA	1	NA	NA	1.16	0.67	0.90	0.67		70 >10		IA	1	1.09	0.79	0.78	0.90	1.17	0.75	>10	NA NA
IPI00029045	IKBKE	IKKe	131			1.36		1.69		NA.	NA.	NA		>10	NA NA		NA	NA	NA	NA.	NA	NA		IA >10		IA.	0	NA	NA.	NA.	NA.	NA.	NA.	>10	NA NA
IPI00004472	WNK1	Wnk1	60		1	NA	NA	0.68		0.88		0.29		0.599	NA	0	NA	NA	NA	NA	NA	NA		IA >10		IA.	1	NA	1.23	NA	1.19	NA	1.01	>10	NA
IPI00004409	DDR2	DDR2	47		1	NA	NA	0.96		1.02	NA	0.51	NA	>10	NA	0	NA	NA	NA	NA	NA	NA		IA >10		IA.	0	NA	NA	NA	NA	NA	NA	>10	NA
IPI00014266	BRD3	BRD3	38		1	NA	NA	1.18		1.19	NA	0.69		>10	NA	0	NA	NA	NA	NA	NA	NA		IA >10		IA.	0	NA	NA	NA	NA	NA	NA	>10	NA
IPI00250316	CDC2L6	CDK11	31	5	1	NA			1.37		1.30	NA		4.635	NA		NA	NA	NA	NA	NA	NA		IA >10		ĮĄ.	0	NA	NA	NA	NA	NA	NA	>10	NA
IPI00003479	PIK3C2A	PIK3C2a	31	- 6		NA	NA	NA	NA	NA	NA	NA	NA	>10	NA NA	0	NA	NA	NA	NA	NA	NA	NA	IA >10	- 1	IA.	1	1.32	NA	0.78	NA	0.73	NA	>10	NA

Abbreviations: SSM; number of spectrum-to-sequence matches, NA; not available.

								bosutir	nib								dasa	tinib							imati	nib			
	Protein	16	highest	highest	highest SSM used for		kinobeads binding	relative to v	ehicle at		[cpd] causing 50% binding	[cpd] at	highest SSM used for		kin	obeads bindi	ing relative	to vehicle at		[cpd] causing 50% binding	[cpd] at inflection	highest SSM		kinobeads bindin	g relative to	vehicle at		[cpd] causing	[cpd] at inflection
IPI acc. no.	Protein	Kinase	score	SSM	quantification	0.0001 0.001 uM uM	0.01 0.033 uM uM		0.33 uM	1.0 5.0 uM uM	reduction (uM)	inflection point of curve (uM)	quantification	0.0001 uM	0.001 uM	0.01 0.03 uM uN			.0 5.0 M uM	reduction (uM)	point of curve (uM)	quantification	0.01 uM	0.033 0.1 uM uM	0.33 uM	1.0 uM	5.0 uM	reduction (uM)	point of curve (uM)
IPI00012197	XTP3TPA 32 KDA PROTEIN.		421 45		11	1.113 1.171	1.148 0.912 NA NA	0.908 (0.877	0.752 0.727	>5 >5	NA NA	6	0.767	0.884	0.969 0.69 NA NA	97 1.213	1.162 0.1	755 0.608 IA 0.526	>5	NA NA	5	0.948 NA	1.095 1.134 NA NA		0.768 NA	0.911 NA	>5	NA NA
IPI00472946	62 KDA PROTEIN.		88	4	2	1.058 1.038	1.139 NA	NA	NA	NA NA	>5	NA	1	NA	NA	NA NA	A NA	1.073 N	IA 0.467	2.598	NA	0	NA	NA NA	NA	NA	NA	>5	NA
IPI00298977 IPI00063827	ABHD14B	AAK1	1299 60	4	35 0	NA NA	0.906 0.829 NA NA	NA	NA	NA NA	1.193 >5	0.411 NA	42 1	NA	NA	0.883 0.84 1.009 1.03	31 1.412		566 0.572	>5	NA 0.364	26 1	0.952	1.142 1.322 1.637 1.347		0.857 0.794	0.992 0.768	>5 >5	NA NA
IPI00329488 IPI00020226		ARG	2193 1036				0.466 0.283 0.992 0.841			0.181 0.149 0.814 0.673	0.009 >5	0.006 NA	51 32			0.299 0.09 0.981 0.93			150 0.094 797 0.705	0.003 >5	0.002 NA	49 24	0.972 1.108	0.834 0.906 0.883 1.120	0.635 1.049	0.468	0.330	0.741 >5	0.393 NA
IPI00021439 IPI00013808			994 99		39		0.993 0.672 1.030 0.866				2.383 >5	0.065 NA	40			1.143 1.35 1.122 1.78			783 1.108	>5 >5	0.833 NA	32 1	1.135	1.145 1.189 NA 1.008		0.798 1.184	0.884 NA	>5 >5	NA NA
	ACVR1	ALK2 ALK4	432 190	28	13	1.344 1.125	1.056 0.873 1.030 0.098	0.854 (0.761	0.658 0.616	>5 0.019	NA 0.018	14	0.826	0.998	1.007 0.74 NA NA	49 1.038	0.851 0.	776 0.563 IA NA	>5	1.395 NA	12	1.103 NA	1.006 1.104 NA NA	1.021	0.737 NA	0.895 NA	>5	NA NA
	ACVR2A	ACTR2	231	9	1	1.338 1.101	1.183 NA 0.941 0.783	NA	NA	NA NA	>5 3.407	NA	2	0.808	1.215	1.288 0.99	96 NA	0.553 N	IA 0.540	>5 1.403	0.050	0	NA	NA NA 0.860 1.194	NA	NA	NA 0.697	>5	NA NA
IPI00007709	ADAM28	ACTR2B	289 57	3	1	1.076 0.917	0.939 0.815	0.928	0.802	0.665 0.707	>5	0.153 NA	0	NA	NA	0.902 0.90 NA NA	A NA	NA N	IA NA	>5	0.732 NA	0	NA	NA NA	NA	NA	NA	>5 >5	NA
IPI00412099 IPI00290279	ADK	ADCK1	110 1231	113	60		1.239 NA 0.868 0.788			0.556 NA 0.587 0.545	>5 >5	NA 0.687	32	0.973	0.959	0.858 NA 0.957 1.05	53 1.010	0.916 0.	012 NA 700 0.441	>5 2.479	NA 0.977	2 28	1.055 0.955	1.026 1.087 1.000 1.023	1.114 0.979	0.768	0.985	>5 >5	NA NA
IPI00004344 IPI00646823			215 52		3		0.859 0.874 1.095 NA				3.624 >5	0.470 NA	0			1.100 NA NA NA			IA NA	>5 >5	NA NA	2	0.874 NA	0.832 1.142 NA NA	1.513 NA	0.800 NA	0.881 NA	>5 >5	NA NA
IPI00215901 IPI00216805	AK2		75 74	4	0	NA NA	NA NA 0.851 NA	NA	NA	NA NA	>5	NA NA	2	NA	NA	0.938 NA NA NA	0.814	NA 0.	I38 NA IA NA	0.308 >5	NA NA	1	NA NA	1.242 NA NA NA	1.250 NA	NA NA	1.307 NA	>5	NA NA
IPI00026663 IPI00103467	ALDH1A3		55	3	0	NA NA	NA NA 1.141 NA	NA	NA	NA NA	>5 >5	NA NA	1	NA	NA	0.701 NA NA NA	0.868	NA 0.	764 NA	>5	NA NA	0	NA NA	NA NA	NA NA	NA NA	NA NA	>5 >5	NA NA
IPI00465439	ALDOA		280		7	NA NA	0.782 1.003	0.939 1	1.047	0.656 0.705	>5	NA	6	NA	NA	1.088 1.07	77 0.998	1.140 0.	752 0.666	>5	NA	6	1.281	0.968 0.991	0.842	0.900	0.833	>5	NA
IPI00005731 IPI00008247	ANAPC5	BMPR1A	42	2 3	3 1	0.770 0.913	0.892 0.864 0.612 NA	0.363	NA I	0.331 NA	>5 0.037	NA 0.012	1	NA	NA	0.989 NA NA 0.60	09 NA	0.890 N	783 0.658 IA 1.290	>5 >5	NA NA	4 0	1.050 NA	1.008 1.311 NA NA	NA	NA	1.065 NA	>5 >5	NA NA
IPI00008248 IPI00025849	ANP32A		77 87		1	NA NA NA NA	0.773 0.774 1.100 0.936	0.632	1.783	0.609 0.694	0.367 >5	0.280 NA	3	NA	NA	0.325 N/ 1.686 0.9	10 1.295	1.235 0.5	332 NA 978 1.214	>5 >5	NA NA	1	NA 1.394	0.604 NA NA 1.185	1.068 NA	NA 2.842	0.758 NA	>5 >5	NA NA
IPI00007423 IPI00218918	ANP32B ANXA1		82 56	6	0	NA NA	NA NA NA NA	NA	NA	NA NA	>5 >5	NA NA	1	NA	NA	1.593 NA 1.435 NA	0.675	NA 1.0	045 NA 091 0.404	>5 3.085	NA 2.606	0	NA 1 221	NA NA NA 1.497	NA NA	NA 0.975	NA NA	>5 >5	NA NA
IPI00418169 IPI00304577	ANXA2		91 501	7	2	NA NA	NA 0.615 0.571 0.622	NA (0.800	NA 0.463	3.055 0.095	NA 0.013	1 0	NA	NA	0.907 NA 0.532 0.42	1.105	1.250 0.9	919 1.035 118 0.323	>5 0.025	NA 0.001	2	0.770	1.092 1.248 0.908 0.894	1.220	0.596	0.859	>5 2.737	0.574 0.292
IPI00016621 IPI00220991	AP2A2		276	11	2	1.144 1.125		NA	NA	NA NA	>5 0.042	NA 0.005	0	NA	NA	NA NA 0.580 0.63	A NA	NA N	IA NA	>5 0.123	NA 0.023	0	NA	NA NA 0.918 1.010	NA	NA	NA	>5	NA
IPI00022256	AP2M1		160	16	8	1.379 0.967	0.732 0.472	0.649	0.408	NA 0.278	0.077	0.019	3	1.723	0.868	0.710 NA	0.627	0.509 0.4	378 0.333 112 0.448	0.215	0.012	9 5	1.207	NA 1.112	NA	0.698	NA	>5 >5	0.269 NA
IPI00218693			53 43	2	0		0.838 NA NA NA	NA NA		NA NA	>5 >5	NA NA	0	NA NA	NA	NA NA 1.270 NA	1.499	NA 0.	IA NA B67 NA	>5 >5	NA NA	1	NA 0.305	1.045 NA 0.982 1.003	1.182	NA 0.549	0.816 1.494	>5 >5	NA 0.014
IPI00020578 IPI00306048	ARAF ATAD3B	ARAF	348 155	31	6		1.062 0.992 1.087 NA				>5 >5	NA NA	6	0.913 1.006	1.038	0.901 0.94 0.858 NA	49 0.991 A 0.567	1.011 0.0 NA 0.0	312 0.816 336 NA	>5 >5	NA 0.010	7		1.176 1.213 NA NA			0.908 NA	>5 >5	NA NA
IPI00440493 IPI00303476	ATP5A1		213 163	10	5	1.107 1.016	1.130 0.705 1.155 0.742	1.296	1.334	0.793 0.680	>5 >5	NA 0.030	4 3	1.000	0.980	0.846 1.07 1.217 1.34	72 0.997	1.017 0.	790 0.522 254 0.849	>5 >5	1.081 NA	2	0.987	0.864 1.070 NA 0.815	0.912	0.862 0.796	0.579 NA	>5 >5	1.983 NA
	ATP5G2	AurA	69 1220	5	0 43	NA NA	NA NA 1.087 0.859	NA	NA	NA NA	>5 >5	NA NA	1 37	NA 0.055	NA 4.472	NA NA 1.108 1.05	NA NA	0.771 N	IA 0.361 916 0.725	1.633	NA NA	0 25	NA 1,299	NA NA 1.016 1.224	NA	NA	NA	>5 >5	NA NA
IPI00176642	AURKB	AurB	659 715	48	15	1.108 0.960	1.007 0.839 0.904 0.859	0.870	0.772	0.619 0.646	>5 1.163	NA 0.703	21	0.894	0.957	0.884 0.80	06 1.160	1.106 0.8	349 0.579 397 0.652	>5 >5	6.126 NA	16 20	1.298	1.094 1.241 0.898 1.103	1.093	0.918	0.809	>5	NA NA
IPI00008255	BCR-ABL		6219	794	218	0.884 0.746	0.312 0.238	0.245	0.226	0.152 0.135	0.004	0.003	137	0.922	0.555	0.271 0.24	48 0.271	0.228 0.	188 0.144	0.002	0.001	162	0.875	0.707 0.735	0.491	0.370	0.261	0.370	0.237
IPI00010862	BMP2K BMPR1B	BIKE BMPR1B	1382 100	5	33		0.957 0.806 NA NA	NA	NA	NA NA	0.364 >5	0.190 NA	44 1	0.888 1.050	1.420	0.870 0.93 1.372 1.08	86 NA	1.106 N	334 0.774 IA 0.768	>5	NA NA	37 1	1.931	0.921 1.167 NA 1.570	NA	0.933	0.809 NA	>5 >5	NA NA
IPI00301434 IPI00556369	BOLA2 BOLA2	SMG1	87 87		2	NA NA	0.901 NA 0.901 NA	0.757	NA I	0.464 NA 0.464 NA	0.332 0.332	NA NA	2		NA NA	0.842 NA 0.842 NA	A 1.217 A 1.217		328 0.440 328 0.440	1.534 1.534	1.072 1.072	2	0.876 0.876	1.004 0.999 1.004 0.999	1.192	0.670 0.670	1.131	>5 >5	NA NA
IPI00303797	BRAF BRD3	BRAF BRD3	296 208	21	2	0.713 0.705 NA NA	1.058 1.371 0.783 0.919			NA 1.316 0.562 0.618	>5 >5	NA 0.858	2	NA	NA	0.979 1.02 0.904 NA	28 1.228		723 0.703 358 NA	>5 >5	NA NA	1 4	0.957 1.066	NA 1.198 1.072 1.223		0.628 1.212	NA 0.992	>5 >5	NA NA
IPI00440727	BRD4 BRD4-NUT FUSIO	BRD4	232		3	0.797 0.625 NA NA			0.806	NA 0.607 NA NA	>5	NA NA	2	0.843	0.906	0.711 0.74 0.839 NA	47 NA	0.506 N	IA 0.505	>5	0.031 NA	3	1.231 NA	NA 1.372 NA NA	NA NA	1.028 NA	NA NA	>5	NA NA
IPI00029132	BTK	втк	3551	549		0.991 0.932	0.700 0.441	0.293	0.218	0.140 0.121	0.027	0.019	170	0.976	0.980	0.598 0.24	45 0.260	0.175 0.	169 0.104	0.013	0.011	259	1.016	0.948 0.989	0.945	0.793	0.795	>5	NA NA
IPI00013004	C17orf63 C21orf124		106 333	24	8	1.022 1.131	0.997 0.741 0.950 0.856	0.878	0.772	0.637 0.615	1.291 >5	1.293 NA	12	1.186	1.289	1.015 0.80 1.103 1.2	18 1.287	0.965 0.9	0.357 0.723	>5	0.779 NA	7	1.063 1.230	1.204 1.155 0.930 1.230	1.212		1.022 0.979	>5 >5	NA
IPI00176469 IPI00301263		ADCK3	1320 1262	72	55 33	0.785 0.909	0.908 0.845 0.830 0.877	0.851	0.718	0.590 0.692 0.665 0.639	>5 >5	0.641 NA	47 28		1.030	0.928 1.03 0.875 1.03	12 0.974	1.100 0.8	727 0.412 315 0.752	1.647 >5	1.058 NA	33 21	1.196 0.994	1.042 1.177 0.870 1.124			0.880 0.821	>5 >5	NA NA
	CALM2 CALML5		132 137	8	0	1.093 0.956 NA NA	1.025 1.052 NA NA	NA	NA	0.553 0.334 NA NA	0.986 >5	0.443 NA	4	0.792 NA	NA	0.821 0.83 0.891 NA	0.993	1.585 0.0 NA 0.0	329 0.939 379 NA	>5 >5	NA NA	2 0	0.819 NA	1.568 0.961 NA NA	1.710 NA	0.655 NA	1.380 NA	>5 >5	NA NA
IPI00020599	CALR CAMK2D	CaMK2d	74 760	8	1 25	2.166 1.443	2.528 NA	NA 0.747 (NA	NA NA	>5 >5	NA 0.420	1 13	NA	NA	0.978 NA 1.103 1.27	1.423	NA 0.	968 NA 913 0.776	>5 >5	NA NA	1 5	1.100	NA 1.366 0.734 1.071	NA 0.985	1.211 0.853	NA 1.071	>5 >5	NA NA
	CAMK2G CAMKK2	CaMK2g CaMKK2	1550 981	633			0.892 0.894 0.976 0.795				>5 1.442	0.362 0.369	67 33	0.879	0.983	0.971 0.94 0.942 0.98	41 1.055		792 0.713 761 0.678	>5	NA NA	60 23	1.037	0.901 1.069 0.906 1.091	0.955	0.816 0.842	0.752 0.841	>5 >5	NA NA
IPI00011285	CAPN1	JaminNZ	50	4	1		1.226 NA	1.138	NA I		1.442 >5	NA	0	NA	NA	NA NA	A NA	NA N	IA NA	>5	NA	0		NA NA	NA		NA	>5	NA
IPI00005969 IPI00218782			134 85	5	1		1.069 0.799 1.000 0.594	0.898 (0.710		>5 2.974	NA 1.429	2	0.937 NA	NA	0.899 1.15 NA 0.85	52 NA	0.948 N	383 0.740 IA 0.616	>5 >5	NA NA	2	1.037	1.073 1.157 NA 1.137	0.928 NA	1.125 0.751	0.884 NA	>5 >5	NA NA
	CASP14 CBS		149 76	9	2		NA NA 0.961 0.720			NA NA 0.742 0.614	>5 >5	NA NA	2	NA 1.422	NA 1.118	NA NA 1.121 0.92	NA NA 1.055		IA NA 375 0.668	>5 >5	NA NA	4 1	NA 1.125	0.815 NA 1.002 1.223	1.713	NA 0.791	0.755 0.827	>5 >5	NA NA
IPI00022865 IPI00294696	CCNA2 CCNB1	1	195 185		4 5		1.249 0.968 1.105 0.868			0.602 0.932 0.618 0.855	>5 >5	NA NA	5 5	1.112		0.804 0.84 1.033 0.95			946 0.919 798 0.880	>5 >5	NA NA	1 3	1.248 1.326	NA 1.189 0.989 1.234	NA 0.897	1.005 0.962	NA 0.685	>5 >5	NA NA
	CCNH		1023	150	31 6	1.033 0.968	0.939 0.819 0.784 NA	0.816	0.750		>5 >5	0.267 NA	39		1.080	0.947 0.95 0.853 NA	58 1.013	0.943 0.	752 0.651 IA NA	>5	NA NA	25	1.181	0.983 1.193 0.444 NA		0.865 NA	0.789	>5	NA NA
IPI00028541 IPI00030247 IPI00297779			346	18	8		0.905 0.829	0.849			>5 >5 0.599	NA	6	0.892	0.955	0.808 0.76	60 0.932	0.778 0.0	0.526 001 0.695	>5	0.714	5	1.225	0.891 1.264 NA NA			0.807 NA	>5	NA NA
IPI00553185			48	8	1	0.807 1.312	1.033 0.950 1.081 NA	NA	NA	NA 0.448 NA NA	0.599 >5	0.090 NA	1	NA	NA	1.224 0.88 NA 0.57	72 NA	0.928 N	IA 0.571	>5 >5	NA NA	0	NA NA	NA NA	NA	NA	NA	>5 >5	NA
IPI00302927 IPI00010720	CCT4 CCT5	<u> </u>	122 89	11	0	NA NA	1.202 0.767 NA NA	NA	NA	NA 0.601 NA NA	>5 >5	NA NA	4 1	NA 2.966	3.697	NA 0.94 1.756 NA	A NA	NA N	IA 0.659	>5 >5	NA NA	0	1.102 NA	NA 0.924 NA NA	NA	0.806 NA	NA NA	>5 >5	NA NA
IPI00018465 IPI00302925	CCT7 CCT8	<u> </u>	143 74	10	3 0		NA 0.898 NA NA	NA (0.980	NA 0.408 NA NA	2.627 >5	NA NA	1 2	1.090 NA	0.158	0.716 NA 0.740 1.19	A NA	NA N	IA NA 903 0.629	>5 >5	NA NA	1	1.266 NA	NA 1.207 0.692 NA	NA 0.848	1.093 NA	NA 0.693	>5 >5	NA NA
IPI00026689 IPI00294575	CDC2 CDC27	CDC2	225 43	30	2		1.898 0.537 1.216 NA	0.474 (0.317 0.515 NA NA	0.039	0.026 NA	1 0	0.998 NA	1.185 NA	1.292 NA NA NA	A NA		IA NA	>5 >5	NA NA	1 0	NA NA	1.069 NA NA NA	0.872 NA	NA NA	1.092 NA	>5 >5	NA NA
IPI00031681 IPI00023530	CDK2 CDK5	CDK2 CDK5	1125	144	56 115	0.992 1.033	0.971 0.761 0.958 0.883	0.771			>5	NA NA	58 102	0.844	0.949	0.904 1.14	41 0.977	0.984 0.8	363 0.728 329 0.767	>5	NA NA	38 69		1.108 1.228 0.994 1.205	1.062		0.956	>5	NA NA
IPI00000685	CDK7	CDK7	952	105	36	0.931 0.892	0.820 0.783	0.731 (0.668		>5	0.080	34	0.893	1.014	0.948 0.89	98 1.059	0.966 0.8	322 0.667	>5	NA	23		0.973 1.164	1.036		0.878	>5	NA
IPI00552413 IPI00396279	CDK9 CLASP1	CDK9	579 44	70	19 0		1.003 0.797 NA NA			0.721 0.610 NA NA	>5 >5	NA NA	16 2	0.967 0.948		0.931 0.99 1.425 N/		0.855 0.8	360 0.572 IA NA	>5 >5	2.010 NA	13 0	0.987 NA	0.949 1.179 NA NA		0.836 NA	0.861 NA	>5 >5	NA NA

								bosu	itinib							C	dasatini	ib								imatir	nib			
			highest	highest	highest SSM		kinobeads bindir	ng relative to	o vehicle a	t	[cpd] causing 50% binding	[cpd] at	highest SSM		kinobe	ads binding r	relative to ve	ehicle at		[cpd] causing 50% binding	[cpd] at inflection	highest SSM		kinobea	ads binding	relative to	vehicle at		[cpd] causing	[cpd] at inflection
IPI acc. no.	Protein	Kinase	Mascot score	SSM	used for quantification	0.0001 0.001 uM uM	0.01 0.03 uM uM	3 0.1	0.33 uM	1.0 5.0 uM uM	reduction (uM)	inflection point of curve (uM)	used for quantification	0.0001 0 uM	0.001 0.0 uM uN	0.033 M uM	0.1 uM	0.33 1.0 uM uM	5.0 uM	reduction (uM)	point of curve (uM)	used for quantification	0.01 uM	0.033 uM	0.1 uM	0.33 uM	1.0 uM	5.0 uM	50% binding reduction (uM)	point of curve (uM)
IPI00010896 IPI00028061	CLIC1 CLK1	CI K1	110		3	NA NA	1.309 1.06 0.825 1.01	5 1.076	1.102	1.049 0.724	>5	NA 0.047	3	NA	NA 1.2	25 0.970 11 0.738	1.520 1 1.536 0	1.113 1.079		>5	NA 0.341	2	1.278	0.776 0.874	1.388 1.400	0.833 0.755	0.636 0.814	0.672 0.770	>5	NA NA
IPI00028071	CLK2	CLK2	296 86 70	7	3	0.992 0.798	0.825 1.01 0.813 0.79 1.202 NA	4 0.696		0.675 0.605	>5 >5	NA NA	2	0.722 0	0.871 1.02			1.210 NA		>5 >5	NA NA	1	0.944 NA NA	0.874 0.996 NA		0.755 0.983 NA		0.770 0.901 NA	>5 >5	NA NA NA
IPI00219341 IPI00004839 IPI00719297	CRKL	CLK3	327 106	22	9	0.948 0.958	0.910 0.83 NA NA	6 0.733	0.839	0.494 0.533	>5 >5	0.366 NA	9	0.941 1 NA	1.071 0.9	19 1.128 92 NA	1.001 C	0.949 0.765	0.667 NA	>5	NA NA NA	9	1.072	0.984	1.145 1.173	1.167 1.403	0.920 0.782	0.876 0.904	>5 >5	NA NA NA
IPI00013212	CSK CSNK1A1	CSK CK1a	2477	406	227 34	1.126 1.091	0.913 0.74 0.984 0.89	0.598	0.435	0.238 0.171	0.175 >5	0.120 0.253	157 33	1.113 1		17 0.608	0.404 0	0.291 0.202	0.162	0.058 >5	0.038 NA	197 21	1.058	1.053	1.053	1.052	0.832	0.883	>5	NA NA
IPI00011102		CK1d CK1e	922 576 626 517	55 57	19	1.114 1.194 0.871 0.961	0.948 0.75 0.874 0.73	1 0.668 4 0.784	0.655	0.417 0.299 0.401 0.361	0.539 1.084	0.212 0.620	4	0.894 1 1.018 0	1.091 1.02 0.945 0.92	29 0.632 21 0.818	1.145 C	0.742 0.708	0.555	>5 >5	0.609 0.693	16 1		0.907		1.061 NA		0.830 NA	>5 >5	NA NA NA
IPI00218437 IPI00016613	CSNK1G3	CK1g3 CK2a1	591	50	21 31	1.056 1.086	1.053 0.91 0.933 0.79	6 0.833	0.797	0.617 0.621	>5 >5	NA 0.122	17 26	0.907 1 0.988 1	1.004 0.95 1.157 0.84	51 0.858 46 0.706	1.027 1 1.055 0	1.011 0.833	0.706	>5 >5	NA 0.267	14 21	1.134	1.144	1.212	1.154 1.096	0.866	0.834	>5 >5	
IPI00010865	CSNK2A2 CSNK2B	CK2a2	1170 498	39	59 16	1.213 1.261	0.986 0.83 0.905 0.75	8 0.703	0.639	0.614 0.587	>5 >5	0.091	50 16	0.971 1 1.283 1	1.211 0.93 1.280 0.83	34 1.007 75 0.928	0.985	0.961 0.894 0.944 0.802	0.729	>5 >5	NA NA	28 12	1.301 1.259	1.082	1.228	1.070	0.837	0.846 0.739	>5 >5	NA NA NA
IPI00020454	CYFIP1 DCK		136 323	22	4 10	0.897 0.950	0.874 NA 0.948 0.92	8 0.888	0.770	0.574 0.761	>5 >5	NA 0.285	9	0.751 0		97 1.020	NA 1.226 1	1.101 0.942	NA 0.815	>5 >5	NA NA	0 6		0.955	NA 1.349	NA 1.117	NA 0.760	NA 0.882	>5 >5	NA NA
IPI00026829	DDR1 DHPS	DDR1	410 435		12 8	1.351 1.370	0.868 0.78 1.211 0.84	1 0.799	0.660	0.492 0.528	2.292 >5	0.981 0.132	5	0.823 0 1.107 1	1.123 0.9	64 NA 62 0.565	NA 0.995 1	1.248 0.589	NA 0.664	0.002 >5	NA 0.530	3 5	1.030	0.851	0.625 1.342	1.151	0.997	0.344 1.184	0.298 >5	0.112 NA
IPI00298547 IPI00397883 IPI00604707	DJ-1 DKFZp686K16132 DLAT		113 118	12	1	NA NA	1.209 NA 1.039 0.69 0.702 0.94	7 0.893	0.557	0.429 0.480	>5 0.870 >5	NA 0.132 0.016	1 22		NA 0.8		1.103 C NA 1 0.979 1	1.021 NA	0.599 0.531 0.746	>5 >5	0.845 NA	2 2 23	0.929	0.649	0.972 1.386 1.089	0.774	1.026	0.868 0.642 0.848	>5 >5	NA NA NA
IPI00293260	DNAJC10 DOK1		819 238 297 798	15	5	1.374 1.102	0.873 0.82 NA 0.39	6 0.676	0.809	0.409 0.776	>5 >5	0.026 NA	6	1.193 1	1.047 0.92	29 0.916	1.116 1 NA	1.107 0.926	0.744 NA	>5	0.010 NA NA	3	1.021	0.947	1.271	1.108	0.803	0.713	>5 >5	NA NA
IPI00013267 IPI00022602 IPI00019329	DOK2		798 218	48	9	0.913 0.908	0.467 0.17 0.924 0.97	4 0.335	0.168	0.221 0.107	0.010 >5	0.009	6	1.082 0	NA NA 0.902 0.24 NA 0.78	43 0.173	0.266 C	0.205 0.168	0.106	0.003	0.002 NA	16 7	0.746	0.650	0.971	0.751		0.321	1.476	2.353 NA
IPI00014344	DYRK1A EDARADD	DYRK1A	166 59	21	4 0	1.106 1.013	0.874 0.82 NA NA	8 0.808	0.782	0.645 0.616	>5 >5	NA NA	4	NA	NA 0.76	67 0.927	1.074 1 NA 1	1.086 0.755	0.713	>5 2.168	NA NA	6	1.209 NA	1.111	1.122 NA	1.087	0.799 NA	0.919 NA	>5 >5	NA NA
IPI00472724 IPI00000875			756 63	72 6	25 0	0.953 1.076 NA NA	1.065 0.80 NA NA	0.800 NA	0.784 NA	0.633 0.670 NA NA	>5 >5	NA NA	2	1.118 1 NA	1.237 0.96 NA 1.33	68 1.061 39 NA	0.954 1 0.966	1.045 0.736	0.652 NA	>5 >5	NA NA	16 1	1.044	0.886	0.968	0.923 NA	0.831 0.624	0.819 NA	>5 >5	NA NA
	EIF2AK1	HRI	248 130	9	5 1	1.205 1.218	1.066 0.77 1.118 0.73	2 0.538	0.671	0.544 0.296	4.232 >5	2.137 0.032	6 4	0.904 1	1.019 1.10 1.185 0.9	15 0.910	1.081 1 1.112 1	1.034 0.813	0.535	>5 >5	0.877 NA	6 3	1.142	1.076	0.969 1.154	1.020	0.627 0.984	1.095	>5 >5	NA NA
	EIF3S1	GCN2	256 789	24 84	4 28	0.853 0.953 1.031 1.142	0.726 NA 1.089 0.88	0.997 9 0.855	NA 0.650	0.878 NA 0.675 0.611	>5 >5	NA NA	8 19		0.681 0.79 0.949 0.83	90 0.842 31 0.981	0.977 C	0.956 0.710 0.973 0.870	0.693	>5 >5	NA NA	6 16	1.333	0.728 1.084	1.224	1.049	0.752	0.603 0.766	>5 >5	NA NA
IPI00376005	EIF4A2 EIF5A2		46 59	3	0 1	NA NA 1.746 1.483	NA NA 1.750 NA	NA NA	NA NA	NA NA	>5 >5	NA NA	1 0	NA	NA NA	44 1.058 A NA	0.999 1 NA	NA NA	0.828 NA	>5 >5	NA NA	0	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	>5 >5	NA NA
IPI00008318	ENO1 EPHA4	EphA4	593 87	7	7	0.916 1.048	1.252 0.90 0.961 NA	. NA	NA	NA NA	>5 >5	NA NA	12 3	1.059 1 0.910 0	0.961 0.87	45 1.228 75 NA	1.109 1 NA	NA NA	0.651 NA	>5 >5	NA NA	8	0.944 NA	NA	1.113 NA	NA	NA	0.829 NA	>5 >5	NA NA
IPI00021275	EPHB1 EPHB2	EphB1 EphB2	240 392 1809		3	NA NA	0.588 NA 0.570 0.53 0.563 0.32	0.349 4 0.472	0.372	0.253 NA 0.434 0.242	0.046 0.055	NA 0.380 0.006	2	NA NA	NA 0.51 0.536 0.31	A NA 90 NA	NA 0.574 0.278	NA 0.535	NA NA	>5 >5	NA NA 0.0005	3 6	1.363	1.103	1.376	0.855 1.020	1.048	0.730 1.019	>5 >5	NA NA NA
IPI00029728	EPHB4 ERCC2 ERCC3	EphB4	1809 1557 64	99	49 68	0.962 1.016	0.563 0.32 0.969 0.84 NA NA	1 0.840	0.788	0.645 0.571	0.012 >5	0.439	36 56	0.863 0 0.970 0 1.004 0	0.996 0.93	35 0.992	0.278 C 1.012 C NA	0.953 0.908	0.210 0.712 NA	0.001 >5	0.0005 NA NA	47 40	1.161	0.983	1.104 1.174 1.768			0.732 0.852 0.577	>5 >5 0.252	NA
IPI00009841	EWSR1 FAMR3A		95	12	3 27	NA NA	NA 1.03 0.975 0.93	6 NA	0.895	NA 0.361 0.577 0.438	0.928 2.354	NA NA 0.164	2 21	1.201 0 0.915 0	0.944 0.8	19 NA 82 0.745 07 0.962	0.782	0.979 0.743	0.508 0.760	>5	0.458	2	0.722	1.264	1.078	0.840 0.813	0.293 0.577 0.874	1.275	0.252 >5 >5	0.208 0.023 NA
IPI00326646 IPI00026781 IPI00554589	FASN		753 141 1256	16 147	4 76	0.807 0.984	0.883 0.68 0.965 0.87	5 0.797	0.711		>5	0.164 0.143 NA	2	0.910 1	1.012 0.93 0.802 0.81	26 NA	1.239 1 1.078 1 1.114 1	1.225 0.911	0.618	>5	NA NA NA	0 39	NA 1.054	NA		NA	NA 0.894	NA	>5	NA NA
IPI00029263	FER FGFR1	FER FGFR1	1660 359	148		0.947 0.906	0.919 0.81	8 0.755	0.643	0.390 0.298	0.618	0.389 0.859	63 12	1.022 1 0.806 0	1.011 0.97	72 1.021 32 1.228	0.971 0	0.925 0.855	0.677	>5 >5	NA NA	49	0.968	0.899	0.990	1.010	0.809	0.864	>5	NA NA
IPI00220253 IPI00012443	FGFR3	FGFR3	77 534	17	0 8	NA NA 0.910 1.071	NA NA 0.978 0.77	NA 3 0.981	NA 0.735	NA NA 0.764 0.656	>5 >5	NA NA			NA NA 1.314 1.05		NA 1.155 1	NA NA	NA 0.771	>5 >5	NA NA	1 8		1.361	NA 1.489	1.660	NA	1.401	>5 >5	NA NA
IPI00026256 IPI00442821			972 77	40 4	0	NA NA NA NA	NA NA NA NA	. NA	NA	NA NA	>5 >5	NA NA	5 1	NA	NA 1.10 NA 0.69	00 NA	1.210 0.830	NA 0.616	NA NA	>5 >5	NA NA	23 1	1.064	1.256 NA	1.453 2.296	2.831 NA	1.001 1.312	1.018 NA	>5 >5	NA NA
IPI00332067 IPI00099986	FLJ35880 FN3KRP		109	15 17	1 6	0.704 0.679 0.948 1.028	0.788 0.73 0.971 0.81	1 NA 2 0.932	0.687	NA 0.492 0.677 0.558	>5 >5	0.310	1 6	0.855 0	0.890 1.17	75 NA 46 1.083 12 NA	NA 1.248 1	NA NA 1.030 0.806	NA 0.840	>5 >5	NA NA	1 5		1.132	1.019 1.264	0.851 0.968	0.793 0.915	0.977 1.135	>5 >5	NA NA
IPI00000885 IPI00260715	FUS	FRK	154 147	13	3 2	NA NA	0.969 NA 1.194 0.63	8 1.010		0.735 0.464	>5 4.480	NA 1.781	3	NA	NA 0.83	39 1.091	0.644 0.954 1	1.235 0.789	NA 0.750	0.149 >5	NA NA	7		1.126	1.197		0.700	0.848 0.857	>5 >5	NA NA
	GAK	FYN GAK	1232 4128	297	16 133	0.869 0.758	0.837 0.50 0.426 0.24	2 0.242	0.163	0.154 0.110	0.073 0.005	0.036 0.004	140	0.817 0	0.949 0.54 0.849 0.93	38 0.806	0.311 C	0.430 0.305	0.312	0.033 0.240	0.007 0.165	22 142	1.142	0.975	1.227	0.982		0.773	>5 >5	NA NA
IPI00008790 IPI00219018 IPI00292753	GAPDH		344 431	24	7 8 17	1.092 1.221	1.015 0.73 1.281 0.67 0.899 0.90	5 0.946	0.837	0.762 0.628	>5 >5 3.395	0.041 NA 0.787	11		1.079 1.03 1.404 1.31 1.358 1.11		1.080 C 1.198 1 1.148 1	1.107 0.777	0.606	>5 >5	0.967 NA	8 10 13	1.078	0.982	1.283 0.886 1.146	0.956	0.882	0.825	>5 >5	NA NA NA
IPI00025273			752 62 809	4	1 16	1.087 1.242	1.326 NA 0.879 0.79	. NA	NA	NA NA	>5	NA NA	18 2	0.718 0 1.087 0	0.921 0.74	99 1.036 41 NA 19 1.003	1.263 1 1.203 1	1.085 1.162	0.731 0.486 0.715	>5	NA NA	0	NA	NA	NA 1.078	NA	0.942 NA 0.634	0.823 NA	>5	NA NA
IPI00180434			977	72	19	1.075 1.013	0.952 0.87	9 0.796	0.750	0.652 0.622 0.151 0.165	>5 0.003	NA 0.002		0.967 1	1.095 0.89	97 0.858 62 0.293	0.847 0	0.889 0.667	0.613	>5	NA NA	22	1.043	0.926	1.021	0.916	0.753	0.715	>5 0.111	NA 0.066
IPI00021327 IPI00000839 IPI00292228	GRM4	GSK3A	57 2022	4 324	1 97	0.957 0.945	0.933 NA 0.932 0.84	NA 9 0.803	NA 0.788	0.664 0.719	>5 >5	NA NA			1.204 1.20 1.046 1.0	04 NA 14 0.850	NA 1.037 C	NA NA 0.894 0.815	NA 0.650	>5 >5	NA NA	0 68	NA	NA 0.960	NA 1.198	NA	NA	NA 0.922	>5 >5	NA NA
IPI00216190 IPI00016862	GSK3B GSR	GSK3B	1701 72	266 6	65 2	1.055 0.961 0.927 0.824	0.938 0.82 0.871 1.31	6 0.848 8 NA	0.779 1.169	0.639 0.690 NA 0.590	>5 >5	NA 1.787	67 0	1.026 1 NA	1.080 1.03 NA NA	35 1.017 A NA	1.080 1 NA	1.029 0.875 NA NA	0.662 NA	>5 >5	NA NA	47	1.086	1.053 0.938	1.175 0.991	1.062		0.897 0.773	>5 >5	NA NA
IPI00219757 IPI00031522	HADHA		121 217 122		2 6	1.004 1.398 0.795 0.951	1.599 1.00 0.898 NA 1.087 0.66	9 NA 0.657	0.713 NA	NA 0.952 0.485 NA	>5 0.957	NA 0.124	3 4	0.899 1	1.065 1.1 0.856 0.8 0.853 1.0	18 1.439 44 0.970	1.396 1 0.748 0 1.197 0	1.320 0.951 0.902 0.785	0.685 0.704	>5 >5	NA NA	1 2	1.636 1.321	NA NA	1.352 1.228 NA	NA NA	0.752 0.915	NA NA	>5 >5	NA NA
IPI00022793 IPI00480146	HBZ		119	6	3	1.063 1.132	1.253 NA	. NA	NA	NA NA	2.739 >5	0.039 NA	3	1.053 1	1.216 1.33	26 1.237	0.967 1	1.153 0.811	0.640	>5 >5	NA NA	1 0	NA NA	NA	NA	NA	NA NA	0.708 NA	>5 >5	NA NA
IPI00029769 IPI00239077	HINT1	HCK	530 61	4	6 1	NA NA	0.973 0.71 1.291 0.87	1 1.107	1.132	0.895 0.748	0.771 >5	0.273 NA	5 2	NA	0.904 0.93 NA 1.00	08 1.236	0.573 1.169 1	1.206 0.914	NA 0.879	0.122 >5	0.085 NA	10 1	1.280 NA	1.339	1.050 NA	1.135		0.955 0.808	>5 >5	NA NA
IPI00719084 IPI00219037	HIST3H2A		144 53	2	1	NA NA	0.776 NA 1.110 NA	1.002	NA NA	0.198 NA 0.041 NA	0.586 0.204	NA NA	0	NA NA	NA NA	A NA	NA NA	NA NA	NA NA	>5 >5	NA NA	0	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	>5 >5	NA NA
IPI00453473 IPI00293564 IPI00003881	HIST4H4 HMGCL HNRPF		123 59 173	4	0	NA NA	0.844 NA NA NA 1.169 0.65	. NA	NA	NA NA	0.189 >5 >5	NA NA 0.025	2	1.012 1	1.173 1.0	A NA 84 NA	NA 1.884 1.049	NA 1.161	NA NA 0.532	>5 >5	NA NA	0	NA NA 1.104	NA NA 1.565	NA NA	NA NA	NA NA 0.571	NA NA 0.848	>5 >5	NA NA 0.597
	HNRPH1		173 139 116	8	1 2	0.945 0.782	0.198 0.69 0.814 0.68	0 NA	0.833	NA 0.558	>5 >5	NA NA	3	1.124 1	0.957 0.8 1.349 1.5 NA 1.1	17 NA	1.049 C NA 1.235 1	NA NA	0.532 NA 0.651	>5 >5	1.221 NA NA	0	1.104 NA 0.956	NA	1.275 NA 1.098	1.373 NA 1.155	0.571 NA 0.786	0.848 NA 0.941	>5 >5	NA NA
IPI00216746 IPI00025054 IPI00018522	HNRPU	1	71 43	7	0	NA NA	NA NA 0.966 NA	. NA	NA	NA NA	>5 >5 >5	NA NA NA	1 0	NA	NA 1.11 NA NA	74 NA	1.235 1 1.278 1 NA	1.248 0.910	0.857 NA	>5	NA NA NA	2	NA NA	1.069		0.936 1.135		0.941 0.911 1.253	>5 >5 >5	NA NA NA
IPI00018322 IPI00398625 IPI00019912	HRNR		540 2397	15	2 80	NA NA	1.094 1.24 0.839 0.98	7 0.575	1.165	0.292 0.581	0.667 >5	0.574 NA	1 107	NA 0.736 0	NA 0.8	00 NA 77 1.186	0.704 1.080 1	NA 0.505	NA 0.760	>5 >5	NA NA	3 63	0.960 1.134	3.694	1.452	11.279	1.136 0.935	1.121	>5	NA NA
IPI00019312 IPI00414384 IPI00514377	HSDL2	1	56 838	3 62	1 17	NA NA 1.036 1.028	0.665 NA 0.751 0.62	1.155 9 0.536	NA 0.531	0.549 NA 0.364 0.334	>5 0.172	NA 0.019	0	NA 1.056 1	NA NA 1.040 0.8	A NA 36 0.792	NA 0.795 C	NA NA 0.637 0.518	NA 0.362	>5 1.235	NA 0.422	0 17	NA	NA 0.966	NA 1.084	NA 1.120	NA	NA 0.832	>5 >5	NA NA
IPI00003362 IPI00003865	HSPA5 HSPA8		546 1348	43 105	15 49	1.047 1.057 1.068 1.017	0.871 0.67 0.745 0.55	4 0.630 9 0.562	0.673	0.422 0.472 0.368 0.313	1.140 0.113	0.024	15 42	0.959 0 0.949 0	0.962 0.79 0.960 0.60	98 0.804 62 0.655	0.724 C	0.879 0.588 0.616 0.476	0.524	>5 0.743	0.544 0.027	14 32	1.125	0.900	1.075 0.950	0.997 0.927	0.748 0.663	0.763 0.700	>5 >5	NA NA
IPI00007765 IPI00025512	HSPB1		613 166	9	16 2	NA NA	0.879 0.54 1.290 0.73	1 1.109	0.576	0.444 0.353 0.676 0.559	0.182 >5	0.022	13 4	0.907 0 NA	NA 0.6	42 0.925 88 NA	0.810 C 1.527 1	1.326 0.659	0.533 0.524	>5 >5	0.443 0.888	14	1.131 0.807		1.068 1.284	1.081 1.770	0.800 0.880	0.805 0.296	>5 1.537	NA 1.318
IPI00382470 IPI00414676	HSPCB		606 1016	61	6 15	1.110 1.151	1.118 0.76 1.128 0.85	9 0.925	0.769 0.859	0.754 0.524 0.820 0.667	>5 >5	0.674 NA 0.014	7 13	1.250 1 1.094 1	1.282 1.10 1.264 1.26 1.090 1.1	04 1.282 68 1.150	0.852 1 1.204 1	1.269 0.798	0.668 0.650	>5 >5	NA NA NA	8 14	1.079	0.808	1.160 0.957	0.831	0.837	0.745 0.728	>5 >5	NA NA
IPI00472102 IPI00220362	HSPD1 HSPE1	1	588 59	38 4	11 0		1.043 0.57 NA NA		0.723 NA	0.631 0.607 NA NA	>5 >5	0.014 NA	12 1		1.090 1.13 NA 0.9		1.172 1 0.641	1.193 0.817	0.699 NA	>5 >5	NA NA	10		0.998 1.105	0.928 NA	0.857 1.235	0.813 NA	0.815 0.892	>5 >5	NA NA

									bosut	inib									da	asatinib									imati	nib			
			highest highest	highest SSM		kii	inobeads	binding re	elative to	vehicle at			[cpd] causing 50% binding	[cpd] at	highest SSI	и		kinobeads l	binding rel	lative to veh	icle at		[cpd] causing	g [cpd] at inflection	highest SSM		kinobea	ds binding	relative to	vehicle at		[cpd] causing	[cpd] at inflection
IPI acc. no.	Protein	Kinase	Mascot score SSM	used for quantification	0.0001	0.001	0.01	0.033 uM	0.1	0.33	1.0 uM	5.0	reduction (uM)	of curve (uM)	used for quantification	0.000	0.001	0.01 uM	0.033	0.1 0.	33 1.0 M uM	5.0 uM		point of curve (uM)	used for quantification	0.01 uM	0.033 uM	0.1	0.33 uM	1.0 uM	5.0 uM	50% binding reduction (uM)	point of curve (uM)
IPI00003384			44 1	0	NA	NA	NA	NA	NA	NA	NA	NA	>5	NA	0	NA	NA	NA	NA	NA N	A NA	NA	>5	NA	1	NA	1.249	uM NA	1.379	NA	1.081	>5	NA
IPI00175647 IPI00029045 IPI00025644	IKBKE	IKKe ILK	149 16 240 24 110 9	0 0	0.600 NA	0.500 NA	0.294 NA	0.738 NA	NA NA	0.712 NA	NA C	NA	>5 >5	0.066 NA NA	1 1	NA	NA NA NA	NA NA NA	1.164	NA 1.3	574 NA 313 NA 937 NA	0.693	3 >5 1 >5	NA NA NA	2	NA 1.758 0.873	NA 1.000 0.926	1.270 1.112	0.900	NA 0.959 0.892	0.569	>5 >5	1.787 NA
IPI00024970 IPI00016932	INCENP SHIP2	ILK	157 14 1604 172	3	NA NA	NA NA	NA NA	NA 1.072 0.273	NA NA	1.063	NA C	.795	>5 >5 0.004	NA NA 0.002	4 26	NA	NA NA 4 0.575	0.770	1.065	1.502 1.3	322 1.034 284 0.272	0.772	2 >5	NA NA	3	0.873 NA 0.928	0.926	NA	0.901	NA	0.760 0.859 0.354	>5 >5 0.713	NA NA 0.281
IPI00076932 IPI00024970 IPI00007402	IPI00000862.1		127 7 91 7	0 3	NA n gne	NA 0.927	NA n gee	NA 1.136	NA 0.785	NA 1 122	NA 0.616	NA 723	>5	NA NA	0			NA 0.938	NA I	NA N	A ΝΑ Δ 0.590	NA NA	>5	NA 0.181	6	NA 1.026	1.430	NA 0.825	1.747	NA 1.016	0.944	>5 >5	NA NA
IPI00001453 IPI00014255	IPPK		50 5 56 4	0	NA NA	NA NA	NA NA	NA 0.954 0.790	NA NA	NA 2 496	NA C	NA 391	>5 2.717	NA NA	0	NA	NA NA	NA NA	NA NA	NA N	IA NA	NA NA	>5	NA NA	1 1	1.658	NA NA	1.421	NA NA	1.080	NA NA	>5 >5	NA NA
	IRAK1 ISOC2	IRAK1	228 11 292 16	4 5									>5 >5	NA 0.243	3	1.089	9 1.033	0.852	NA .	1.009 1.2	238 0.773 055 0.949	0.565	5 >5 3 >5	0.955 NA	3	1.041	0.852	1.194	1.329	0.906	0.944	>5 >5	NA NA
IPI00011633 IPI00554711	JAK1 JUP	JAK1	1769 117 82 6	50 0	1.050 NA	1.010 NA	0.906 NA	0.868 NA NA 0.561	0.806 NA	0.728 NA	0.582 C	.480 NA	3.833 >5	0.549 NA	46 2	0.952 NA	2 1.088 NA	0.911	0.887 NA	0.946 0.9 1.072 N	925 0.679 IA 0.558	0.559 NA	>5 >5	0.753 NA	44 0	1.204 NA	0.993 NA	1.089 NA	0.991 NA	0.810 NA 0.900	0.724 NA	>5 >5	NA NA
IPI00008575 IPI00166708	KHDRBS1 KHDRBS2		71 6 74 8	0	NA NA	NA NA	NA 0.851	NA 0.561	NA 0.923	NA 0.738	NA 0.683 C	NA .660	>5 >5	NA 0.353	2	0.833 NA	3 0.746 NA	0.764 1.150	1.154 NA	NA 1.1 1.500 N	I58 NA IA 1.012	0.695 NA	>5	NA NA	1	0.946 0.954	NA 0.917	0.882	1.102	1.044	1.016	>5 >5	NA NA
IPI00641384			183 10 455 15	7	0.846	0.956	0.896	0.822 0.746 0.888	0.830	0.986	0.657 0	.661	>5 3.316	NA 0.727	4 11	NA 1.105	NA 5 1.096	0.516	0.864	0.963 1.0	385 0.697 054 0.788	0.682	>5	0.009 NA NA	3 6	1.022 0.806	0.939 0.910	0.918 1.222	0.987 1.066	0.859 0.836 0.801	0.782 0.799	>5 >5	NA NA
IPI00465142 IPI00657720		QSK	597 57 1042 103	11 20	1.116	0.973	0.868	0.594	0.590	0.389	0.278	.206	>5 0.125	0.068	13 19	1.030	8 1.103 0 1.104	0.948	0.738	0.685 0.6	061 0.779 091 0.381	0.432	0.772	0.075	11 22	1.040	0.857 0.984	1.115	0.947	0.810	0.760	>5 >5	NA NA
IPI00022296 IPI00001639		KIT	984 91 114 9	26 1	0.820 2.988	0.863 2.564	0.895 2.283	0.846 NA	0.836 NA	0.848 NA	0.706 C	.647 NA	>5 >5	NA NA	9	NA	9 0.954 NA	0.983	0.894	0.981 1.1	280 0.235 185 0.619	0.633	3 >5	0.011 NA	20 0	1.150 NA	0.947 NA	NA	NA	0.573 NA	NA	1.451 >5	0.507 NA
IPI00010471 IPI00217966			87 6 238 17	3	0.940	NA 1.064	NA 1.226	NA 0.699 0.344 0.934	NA 1.072	0.686	NA 0	.719	>5 >5	NA 0.017	4	1.489	9 1.600	1.141	1.258 NA	1.268 1.3 1.582 1.2	360 0.839 262 1.017 514 1.084	0.688	3 >5	NA 0.330	3	NA 0.914	NA 1.111	NA 1.095	0.819	NA 0.731	NA 0.864	>5 >5	NA NA
IPI00219217 IPI00554498	LDHC		165 8 96 5	0	NA	NA	NA	NA	NA	NA	NA	NA	>5 >5	NA NA	1	NA	NA	NA	0.871	NA 0.9	990 NA	0.874	>5	NA NA	0	1.247 NA NA	0.646 NA 0.809	0.665 NA	1.134 NA	0.936 NA	0.987 NA	>5 >5	NA NA
IPI00023673 IPI00217223 IPI00291702	LGALS3BP LGALS7	LIMK1	57 6 151 16	0	0.892 NA	1.102 NA	0.785 NA	0.504 NA	0.558 NA	0.787 NA	0.347 C	.475 NA	>5 >5	0.010 NA NA	0 6	NA NA	NA NA	1.199 NA	0.752 NA	1.503 1.1 NA N	113 1.077 IA NA	0.67	>5 >5 1.874	NA NA 0.466	10	1.171 1.223	0.809 1.234 0.926	1.399	1.554	NA 1.236	0.786	>5 >5	NA NA NA
	LIMK2 LMNA	LIMK2	340 29 586 44 276 22	14	0.968 NA	0.989	0.957	NA 0.793 0.876 NA	0.790 NA	0.768 NA	0.619 C	.668	>5	NA NA	12	1.040	0 0.959 NA	1.037	0.966	1.125 0.8	NA NA 784 0.541 875 0.670 898 0.615	0.40	2.044	0.840 NA	12	1.085	1.062 NA	1.013	1.057	1.021 0.887 1.258	0.947	>5	NA NA
IPI00021405 IPI00025746 IPI00383046	LOC129138 LOC134147		149 14 57 4	1 2	NA NA	NA	0.946	NA	0.685	NA	0.434	NA	0.207 0.606	NA 2.412	0	NA		NA	NA	NA N	A NA	NA	>5	NA NA	4	1.207 NA	0.933 NA	1.294	1.029	0.949	0.880	>5 >5	NA NA
IPI00218084 IPI00554749	LOC143244		45 2 214 16	1 1	NA NA	NA NA	3.053	0.284 NA NA	2.899	NA NA	2.246	NA NA	>5 0.153	NA NA	0	NA	NA NA	NA NA	NA NA	NA N	IA NA IA NA ISS NA	NA 0.423	>5 2 1.751	NA NA	0	NA 0.915	NA 1.071	NA 1.089	NA 0.774	NA NA 0.748	NA 0.927	>5 >5	NA NA
IPI00002966 IPI00455945	LOC342897 LOC347381		52 2 50 3	0	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	>5 >5	NA NA	0	NA	NA NA	NA	NA	NA N	A NA A 0.696	NA	>5	NA NA	1 0	NA NA	2.108 NA	NA	2.243	NA NA	1.386	>5 >5	NA NA
IPI00003495 IPI00457307	LOC388177 LOC391039		53 1	0 3									>5 >5	NA NA	0	NA	NA	NA	NA	NA N	IA NA	NA	>5	NA 0.584	1	NA 2.432	2.805 1.573	NA	3.097	NA 1.107	1.316	>5 >5	NA NA
IPI00005126 IPI00401431	LOC400097 LOC400236		127 11 51 3 37 1	0	NA NA	NA NA	NA NA	0.862 NA 1.265 NA	NA NA	NA 0.923	NA C	NA .598	>5 >5	NA NA	0	NA	NA	NA	NA	NA N	981 0.696 IA NA IA NA	NA	>5 >5	NA NA	1 0	NA NA	0.814 NA	NA	0.934 NA	NA	0.978 NA	>5 >5	NA NA
IPI00456800 IPI00386435	LOC441388 LOC494150		109 6 68 2	0									>5 0.678	NA NA	1 0	NA	NA NA	NA	NA	NA N	IA NA	NA	3 >5 >5	NA NA	0	NA NA	NA NA	NA NA	NA NA	NA	NA NA	>5 >5	NA NA
IPI00396563 IPI00396321	LOC51035 LRRC59		54 9 73 4	4 1	NA NA	NA NA	1.112	1.001	1.101	2.186	0.481 1	.017	>5 >5	0.589 NA	0	NA	NA NA	NA	NA	NA N	972 1.043 IA NA	NA	>5	NA NA	1 0	0.905 NA	NA NA	1.771 NA	NA	0.372 NA	NA NA	0.699 >5	NA NA
IPI00298625 IPI00007321	LYN LYPLA1 MAP2K2	LYN MAP2K2	2147 337 146 6 79 7	71	1.077 NA	1.046 NA	0.839 NA	0.622 0.602 0.779	0.467 NA	0.346	0.216 C	.078	0.080 >5	0.038 NA	41 3	NA	9 1.165 NA NA	1.060	0.873	1.088 1.0	209 0.237 096 0.952	0.69	>5	0.012 NA NA	76 0	1.221 NA NA	1.135 NA NA	1.155 NA	0.999 NA	0.927 NA NA	0.865 NA	>5 >5	NA NA NA
IPI00003783 IPI00185860 IPI00012318	MAP2K5	MAP2K2 MAP2K5 MAP3K1	79 7 265 16 911 50	1 3 19	NA NA	NA NA	0.874	0.779	0.692	0.711	0.406	.184	2.742 0.395 0.104	2.997 1.307	6 26	1.108	8 1.256	0.873	1.022	1.002 0.9	129 NA 903 0.663	0.403	2 >5 3 2.722 5 >5	1.061	0 8 19	1.234 1.022	1.044 0.913	1.229	1.117	0.777	0.994	>5 >5 >5	NA NA NA
IPI00012318 IPI00000977 IPI00513803	MAP3K11	MLK3 MAP3K2	358 22 396 28	6	1.082	0.924	0.845	0.655 0.601 0.757 0.784 0.871	0.712	0.764	0.463 0	.501	3.389 0.194	0.024 0.158 0.056	6	1.053	7 1.051 3 1.120 NA	0.960	0.860	0.917 1.1	906 0.652 113 0.713 974 0.615	0.756	>5	0.676 NA 0.910	6	0.979 1.363	1.020 1.065	1.163	1.065	0.834 0.683 0.862	0.696	>5	NA NA NA
IPI00181703	MAP3K3 MAP3K4	MAP3K3 MAP3K4	314 27 2358 206	3	1.064	1.010	1.142	0.871	0.837	0.646	0.620 0	.450	2.811 0.090	0.172 0.026	3	0.928	8 0.953	0.905	0.839	0.766 0.6	889 0.874	0.53	>5	2.446 0.234	3 79	1.176	1.039	1.079	1.218	0.852	1.089	>5	NA NA
IPI00412433 IPI00020258	MAP3K5	MAP3K5 HPK1	81 8 72 5	1 0	NA NA	NA NA	NA NA	0.980 NA	NA NA	0.731 NA	NA C	.613 NA	>5 >5	NA NA	1 0	NA NA	NA NA	0.667 NA	NA I	0.981 1.1 NA N	118 0.712 IA NA	0.796 NA	>5 >5 >5	NA NA	0	NA 1.114	NA 1.230	NA 1,379	NA 1.430	0.832 NA 0.907	NA 0.977	>5 >5	NA NA
IPI00149094 IPI00217024	MAP4K2	GCK KHS2	244 21 217 15	3 6	1.172	1.151 0.863	0.865	0.573 0.980 NA NA 0.324	0.791	NA 0.330	0.368 0.208 0	NA .238	0.438 0.025	0.253 0.011	5	0.970	0 1.014 1 1.537	0.960	0.756	1.013 1.1 0.893 0.7	118 0.712 IA NA 164 0.603 784 0.800	0.686	5 >5 7 >5	NA 0.418	6 3	1.212	1.138	1.353	0.988	0.907 0.884 0.733	0.952 0.813	>5 >5	NA NA
IPI00294842 IPI00003479	MAP4K5	KHS1 Erk2	349 22 2343 1313	6 383	0.922	0.821	0.493	0.521	NA.	0.405	NA L	.261	0.025 >5	0.005 NA	9 350	1.052	2 1.053 5 1.060	0.855	0.870	0.740 0.9 1.003 0.9	984 0.493 981 0.819	0.447	7 3.163	1.250 NA NA	9 264		0.967	1.097	0.976 1.050	0.731	0.817 0.889	>5 >5	NA NA
IPI00019473 IPI00002857	MAPK14	p38b p38a	390 40 1622 722	184	0.850 1.015	0.907 0.988	0.874	0.881 0.710 0.836	0.766 0.810	0.705 0.779	0.551 C	.463	4.162 >5	0.711 0.425	4 174	1.065	1 0.927 5 1.133	0.808	0.932	1.097 0.8 0.909 0.8	302 0.703 314 0.578	0.680) >5 7 2.119	0.858	6 152	1.176 1.050	0.999 0.965	1.008	0.954	0.890	0.824	>5 >5	NA NA
IPI00018195 IPI00024672	MAPK8	Erk1 JNK1	1211 274 1891 279	19 96	1.103	1.039	1.020	0.772	0.911	0.738	0.673 C	.680	>5 >5	NA NA	13 80	0.990	6 1.059 0 1.045	0.952	0.938	0.962 0.9	0.806 0.841 0.841	0.73	>5	NA NA	12 48	0.953 1.143	1.209 1.132	1.056	1.085	0.818 0.806	0.949	>5 >5	NA NA
IPI00303550 IPI00555838	MARK2	JNK2 MARK2	1451 233 1154 87		1.041	0.986	0.910	0.824	0.833	0.752	0.600	.533	>5 >5	NA 0.133	53 21	1.014	1 0.998 4 1.114	0.926	0.966	1.022 1.0 0.936 1.0	063 0.824 003 0.763 097 0.726	0.692	2 >5 7 >5	NA NA	34 18	1.057	1.013	1.105	0.998	0.786 0.777 0.789	0.831	>5 >5	NA NA
IPI00183118 IPI00064797	MARK4	MARK3 MARK4	670 44 278 19 103 8	8 2	1.199	1.090	1.011	0.836 0.884 NA	0.795 NA	0.732 NA	NA 0.446	NA	>5 >5 0.235	0.102 NA 0.054	9	NA	3 1.083 NA 7 0.951	0.837	0.643	0.927 0.8	997 0.726 359 0.693 755 0.937	0.489	>5	NA 2.950 NA	10	1.173 1.359 NA	1.036 0.879	0.359	1.220	0.789 2.171 NA	0.762	>5 >5	NA 0.335 NA
IPI00412253 IPI00291006 IPI00006471	MDH2	MELK	176 12	4 7	1 313	1 246	1 238	NA 0.899	1 022	0.812	0.831	747	0.235 >5	NA NA	5 9	1.399	9 1.362	1.438	1.064	1.188 1.2	264 0.892	0.649	5 >5 9 >5 5 >5	NA NA NA	1 4 5	1.008 1.180	1.140 0.972 1.002	1.000	0.992	0.813 0.809	0.790	>5 >5	NA NA NA
IPI00008471 IPI00029756 IPI00294528	MERTK	MER MET	247 23 152 13 259 12	3	1.176	1.214	1.026	0.744 NA NA 0.658	0.680 NA	NA NA	0.385 NA	NA NA	0.154	0.098 NA	3 7	0.943	0 1.249 3 0.944 4 0.678	1.002	1.134 NA	1.212 1.0 NA N	096 0.949 060 0.924 IA NA	0.735 0.631	>5	NA NA	3	1.147 NA	0.880 NA	1.046 NA	0.853 NA	1.174	0.717 NA	>5 >5	NA NA
IPI00063242 IPI00293276	MGC5352	III.	43 3 492 231	1 111	NA 0.838	NA 0.925	1.016	0.658 0.870	0.915	0.555	0.441 0	406	0.793	0.191 NA	1 102	NA 0.821	NA 1 0.963	1.131	NA I	0.679 N	A 0.812	! NA	>5	NA NA	0 77	NA 0.983	NA 0.977	NA	NA	NA 0.842	NA	>5 >5	NA NA
IPI00294701 IPI00514912	MNAT1		845 58 104 9	29	0.991	1.008	0.957	0.831	0.817	0.724	0.627 0	.662	>5 >5	NA 0.419	24	0.921	1 0.991 NA	1.010 0.958	1.063	1.131 0.9	964 0.924 076 1.026	0.673	3 >5	NA 2.265	16	1.115	0.978	1.213	1.064	0.919	0.784	>5 >5	NA NA
IPI00513678 IPI00397526	mTOR MYH10	FRAP	213 23 206 22	5	0.951 NA	1.058 NA	0.877 NA	NA NA	NA NA	NA NA	NA NA	NA NA	>5 >5	NA NA	6 5	1.303	3 1.159 NA	1.164	NA	NA N	IA NA 668 NA	NA	>5 7 >5	NA NA	1 0	1.090 NA	NA NA	1.098 NA	NA NA	0.894 NA	NA NA	>5 >5	NA NA
IPI00161341 IPI00306531	MYH9		88 3 417 32	0	NA	NA	NA	NA 0.290 NA	NA	NA	NA	NA	>5 0.010	NA 0.008	0 8	NA	NA	NA 0.469 1.789	NA	NA N	A NA 233 0.228	NA 0.149	>5	NA 0.008	13	NA 0.762	0.986 0.718	NA 0.979	1.877 0.956	NA 0.614	0.827 0.473	>5 >5	NA 2.776
IPI00604620 IPI00021331	NEK2	NEK2	124 7 636 52	2 13	NA 1.016	NA 1.022	0.869	NA 0.960 0.873	0.867 1.076	NA 0.801	0.650 0.824 0	NA .538	>5 >5	1.461	2 17	0.874	4 1.111	1.091	1.341	1.416 1.3	073 NA 854 1.031	0.844) >5 1 >5	NA NA	0 11	NA 1.188	NA 1.020	NA 1.359	NA 1.175	NA 1.114 0.749	NA 1.061	>5 >5	NA NA
IPI00301609 IPI00008237	NLK	NEK9 NLK	2812 264 549 92	150 16	0.940	0.943	0.898	0.769	0.825	0.659	0.541	363	>5 1.442	0.550 1.190	110 12	1.067	7 0.929 9 1.195	0.923	0.885	0.934 0.8 0.922 0.6	381 0.847 395 0.443	0.88	5 0.827	NA 0.409	108 10	0.778 1.199	0.739 1.103	1.170	1.076	0.849	0.820	>5 >5	NA NA
IPI00375531 IPI00026260	NME2		143 9 143 9	3	NA 1.198	NA 1.133	0.828 1.301	0.509 NA NA NA	0.745 NA	0.705 NA	0.520 C	.519 NA	>5 >5	0.132 NA	3	NA	2 1.293 NA	0.865			301 0.661 IA 0.578		>5	NA NA	3	NA 1.224	1.175 NA	1.425	1.257 NA	1.062	0.725 NA	>5 >5	NA NA
IPI00216654 IPI00304596 IPI00395632	NONO	ALK	58 0 98 12 74 4	2	1.361	1.022	1.200	NA NA NA	NA NA	NA NA	NA NA	NA NA	>5 >5	NA NA NA	2	NA	8 1.186 NA NA	3.870 1.126	NA :	2.925 0.7	A NA 754 2.632 IA 0.975	NA 0.519	>5 >5	NA 0.548 NA	3	NA 1.072 NA	NA NA NA	1.204	NA NA	1.063 NA 0.720 NA	NA NA	>5 >5	NA NA NA
IPI00395632 IPI00549248 IPI00012069	NPM1	MLK	74 4	0 0 7	NA NA	NA NA	NA NA	NA NA 0.948	NA NA	NA NA	NA NA	NA NA	>5 >5	NA NA NA	1 1 9	NA	NA NA 3 1,374	1.126	NA I	0.906 N	A 0.975 A 0.975 932 0.875	NA.	>5 >5	NA NA NA	0	NA NA 1.152	NA NA 1.040	NA NA	NA NA	NA NA 0.864	NA NA	>5 >5	NA NA NA
IPI00012069 IPI00219129 IPI00025076	NQO2	TRKA	306 21 1717 600 735 61	7 338 24	0.889	0.969	0.970	0.895	0.888	0.826	0.681 0	.760	>5 >5	NA NA NA	356 23	0.973	3 1.374 3 0.961 3 0.750	0.965	0.970	1.012 0.9	932 0.875 960 0.824 965 0.776	0.680	>5	NA NA NA	7 167 21	1.152 0.871 1.012	1.040 0.738 1.145	0.636	0.447	0.864 0.278 0.989	0.225	>5 0.214 >5	0.157 NA
IPI00025076 IPI00217223 IPI00014068	PAICS	PAK4	497 31 841 80	10				0.907 0.880 0.778					>5	0.228 0.043	10 17	1.200	0 1.262	0.885	0.809	0.785 0.8	380 0.534 389 0.706	0.646	3 >5	0.100 NA	6	1.351	1.252	1.265	1.227	0.942	0.950	>5	NA NA

						bos	sutinib									dasa	atinib								imatir	nib			
		highest	highest SSM	k	inobeads bind	ing relative	to vehicle	at		[cpd] causing	[cpd] at	highest SSM	и	k	inobeads bind	ding relative	to vehicle a	ıt	[cpd] caus 50% bindi		highest SSM		kinobea	ds binding	relative to	vehicle at		[cpd] causing	[cpd] at inflection
IPI acc. no. Proteir	Kinase	Mascot SSM	used for quantification 0.0001	0.001	0.01 0.0 uM u	33 0.1	0.33	1.0 uM	5.0	50% binding reduction (uM)	inflection poir of curve (uM	nt used for) quantification	0.0001	1 0.001	0.01 0.0 uM u	0.1	0.33	1.0 uM	5.0 reduction uM (uM)		used for quantification	0.01	0.033	0.1	0.33	1.0	5.0	50% binding reduction (uM)	point of curve (uM)
IPI00449049 PARP1		81 6	6 0 NA	NA	NA N	A NA	. NA	NA	NA	>5	NA	1	NA	NA	NA 1.0	081 NA	1.552	NA ·	1.499 >5	NA	0	uM NA	uM NA	uM NA	uM NA	uM NA	uM NA	>5	NA
IPI00553006 PARS2 IPI00016610 PCBP1		49 4 240 14	4 1 NA 4 6 1.052	NA 1.144	1.155 N 1.065 0.7	A 1.00 90 0.95	3 NA 4 0.794	1.600 0.626	NA 0.678	>5 >5	NA NA	6	1.008	NA 3 1.055	NA 0.5 1.002 0.7	775 1.113	0.722 3 0.919	0.911 (0.283 1.841 0.596 >5	NA 1.965	0 5	NA 0.968	NA 0.949	NA 1.222	NA 1.118	NA 0.786	NA 0.868	>5 >5	NA NA
IPI00216689 PCBP2 IPI00000690 PDCD8		86 5 69	5 1 NA 7 1 0.926	1.040	NA 0.5 1.191 N	Λ N/Λ	NIA	NIA	NIA	>5 >5	NA NA	1	0.965	NA 5 1.049	NA 0.6 0.980 0.8	314 0.913	1.280 3 1.132	0.609	1.110 >5	NA NA	1	0.820 0.747	NA 0.891	0.693 1.063	NA 0.891	0.703 0.540	NA 0.984	>5 >5	NA 1.386
IPI00306301 PDHA1 IPI00003925 PDHB IPI00298423 PDHX		78 3 177 6	3 0.701 3 1 0.633 6 3 0.447	0.665	0.646 N 0.596 N 0.535 N NA 1.1	A NA	NA NA	NA NA	NA NA	>5 >5	NA NA NA	2 3	0.373	NA 3 0.564	NA N 0.439 N 0.583 N	IA NA	NA NA	NA NA	NA >5 NA >5	NA NA NA	0	NA NA 0.999	NA NA 0.954	NA NA	NA NA	NA NA 1.109	NA NA	>5 >5 >5	NA NA NA
IPI00299571 PDIA6 IPI00002538 PDPK1	PDK1	71 3 713 50	3 1 NA 0 14 0.982	NA 1.010	NA 1.1	32 NA	1.316	NA NA	0.748	>5 >5	NA NA	1 15	NA	NA 3 1.146	1.272 1.4 1.015 0.8	118 1.577	7 1.240	1.003	1.307 >5	NA NA	0	NA 0.926	NA 0.930	NA NA	NA	NA NA	NA	>5 >5	NA NA
IPI0002336 PEF1 IPI00216691 PFN1	FBRI	107								>5 >5	NA NA	2	0.759	0.959	0.902 N 3.298 N	IA NA	NA	NA	NA >5	NA NA	0	NA 0.917	NA NA	NA 0.840	NA NA	0.818 NA 0.649	NA NA	>5 >5	NA NA
IPI00169383 PGK1 IPI00017334 PHB		134 12 210 9	2 2 NA 9 3 0.924	NA 0.912	NA N NA 0.7 0.861 0.7 0.843 0.7	92 NA 65 NA	0.988	NA NA	0.558	>5 >5	NA 0.549	3 4	0.743	3 0.877 2 0.867	1.110 1.0 0.910 0.9	009 1.247	7 1.077	0.781 (0.754 >5 0.898 >5	NA NA	3	1.127	0.919	1.056	0.900	0.826 1.020	0.721 1.174	>5 >5	NA NA
IPI00027252 PHB2 IPI00011200 PHGDH		244 16 138 12	2 2 NA	NA.	0.973 1.0	66 1.04	8 0.895	0.704	0.751	>5 >5	NA NA	6 4	0.676	6 0.760 6 0.935	0.848 0.8 0.986 1.0	390 1.058 302 0.858	8 1.031 8 1.018	0.839	0.841 >5 0.719 >5	NA NA	4 0	1.129 NA	0.861 NA	1.096 NA	0.995 NA	1.060 NA	0.842 NA	>5 >5	NA NA
IPI00292056 PIK3C2B IPI00009688 PIP5K2A	PIK3C2b PIP5K2A	78 12 101 7	2 0 NA 7 1 0.631	NA 0.878	NA N 1.136 0.5	A NA 86 0.80	NA 7 0.634	NA 0.717	NA 0.676	>5 >5	NA NA	0 2	0.966	1.157	NA N 1.104 0.6 1.022 N	IA NA 886 0.999	NA 9 0.828	NA 0.726	NA >5 0.669 >5	NA NA	1	NA 1.163	0.764 1.139	NA	0.746	NA 0.822 0.648	0.569	>5 4.187	NA 1.999
IPI00216470 PIP5K2B IPI00152303 PIP5K2C	PIP5K2B PIP5K2C	169 6 170 13	4 0 NA 5 5 0.847	NA 0.707	1.136 0.5 NA N 0.937 0.7 0.887 0.5	A NA 34 1.11	NA 4 0.696	NA 0.625	NA 0.404	>5 2.635	NA 0.990	1 4	1.010	1 1.284	1.287 N	IA 0.884	4 NA	0.708	NA >5	NA NA NA	1	1.074 0.836	1.721 NA	0.942 0.870	1.022 NA	0.648 0.364 0.747	1.061 NA	>5 0.586	NA NA
IPI00220644 PKM2 IPI00384765 PKMYT1	MYT1	866 71	11 32 1 1 026	0.957	0.945 0.7	22 I 0.64	6 0.489	0.380	0.255 1	1.048 0.297	0.430 0.131	32	0.958	1.646 3 1.067	1.368 1.1 0.966 0.9	972 0.934	4 0.755	0.583	0.342 1.489	0.746	5 24	1.043 1.162	0.944 0.937	1.065	0.999	0.755	0.758	>5 >5	NA NA
IPI00412672 PKN1 IPI00413780 PKN3 IPI00410344 PLK4	PKN1 PKN3 PLK4	179 17 149 20 250 12	7 3 NA 0 3 1.031	0.933	0.808 0.9 0.877 0.6 1.059 0.8 NA N	47 1.06	0.888	0.577	0.554	>5 >5	2.937 0.516 NA	3	0.857	7 0.894	0.760 1.2 0.852 0.7 0.994 0.9	726 0.825	5 0.997	0.651 (0.599 >5 0.596 >5	0.771 0.168 NA	0	1.430 NA 0.723	1.243 NA 1.326	1.267 NA	0.967 NA	0.946 NA 0.841	0.913 NA	>5 >5	NA NA NA
IPI00026829 PLS3 IPI00455547 POTE2	PLN4	48 4	4 0 NA	NA 1,000	NA N 1.038 N	A NA	. NA	NA NA	NA NA	>5	NA NA	0	NA	NA 3 2.379	NA N 1.622 N	IA NA	NA	NA	NA >5	NA NA	1	1.275 NA	0.838 NA	1.260	1.094	0.822 NA	0.737	>5	NA NA
IPI00480133 PPIA IPI00008380 PPP2CA		356 23 187 6	3 7 1.234 6 2 1.047	1.314	1.150 0.9 0.881 N	38 0.95 A 0.81	2 1.039 9 NA	0.802	0.744 NA	>5 0.892	NA 0.262	9	1.353	3 1.604 1 1.69	1.623 1.1 0.804 0.1 0.835 0.9	161 1.196	6 1.512	0.925	0.690 >5 0.557 >5	NA 0.371	12	1.142	0.885	0.922	0.860	0.862	0.698	>5 >5	NA NA
IPI00419307 PPP2R1A IPI00332511 PPP2R2A		233 16 128 5	5 5 1.043 5 3 1.104	1.045	1.150 0.9 0.881 N 0.837 0.7 1.138 0.7	30 0.76	9 0.784	0.666	0.478	>5 >5	0.647 0.839	5 4	1.299	1.152	0.835 0.9 1.076 1.1	940 0.844	4 0.882	0.572 (NA	0.555 >5 0.699 >5	0.399 NA	3	1.024 NA	0.711 NA	1.029 NA	0.878 NA	0.771 NA	0.622 NA	>5 >5	NA NA
IPI00184845 PPP2R2D IPI00000874 PRDX1		116 11 331 17	1 3 1.076	0.945	0.885 N	A I 0.69	2 I NA	0.433	NA I	0.559 >5	0.166 NA	7	NA		NA N 1.173 0.9	IA NA 979 1.328	NA	NA	NA >5 0.654 >5	NA NA	0	NA 1.075	NA 1.118	NA 0.986	NA 1.056	NA 0.847	NA 0.855	>5 >5	NA NA
IPI00011937 PRDX4 IPI00220301 PRDX6		195 12 228 14	2 3 1.408 4 7 0.839	1.249 0.989	1.282 0.8 1.381 0.8 1.131 0.7	88 1.22 54 0.98	5 0.768 2 0.734	0.734 0.694	0.681	>5 >5	NA NA	3 6	1.039	1 1.016	1.246 1.1 1.088 0.8	152 1.038 359 1.097	8 1.010 7 1.053	0.764 (0.603 >5 0.594 >5	NA 2.004	3 4	1.010	1.008 0.990	1.180 0.976	1.268	0.793	1.089 0.900	>5 >5	NA NA
IPI00410287 PRKAA1 IPI00220409 PRKAB1	AMPKa1	1991 242 683 98	2 114 0.937 8 26 0.924	0.916 1.148	0.888 0.8 1.065 0.9	20 0.77 15 0.91	2 0.717 7 0.733	0.595 0.646	0.426	2.463 >5	0.981 0.221	114 21	0.960	9 1.013 0 1.232	0.964 1.0 1.008 1.0	066 1.237	8 0.980 7 0.960	1.014	0.728 >5	NA NA	76 21	1.087 1.106	1.029	1.192	1.015	0.841 0.900	0.899	>5 >5	NA NA
IPI00013905 PRKAB2 IPI00413318 PRKAG1		489 38 1670 162	8 11 1.078 2 87 0.998	1.163	1.093 0.8 0.990 0.8 0.980 0.7	86 1.03 84 0.85	7 0.844 9 0.753	0.702 0.596	0.497 0.475	>5 3.386	1.014 0.519 0.291	11 87	1.035	0.933	1.003 0.9 0.957 1.0 0.981 0.8	997 1.070 027 1.087	0 1.036 7 1.006	0.791 (0.727 >5 0.717 >5	NA NA NA	5 59	1.211	1.042 0.965	1.203	1.012	0.716 0.862	0.837	>5 >5	NA NA
IPI00005367 PRKAG2 IPI00385449 PRKCA IPI00219628 PRKCB1	PKCa PKCb	613 43 711 68 1219 268	3 2 1.265	1.404	0.980 0.7 1.167 0.9 0.897 0.9	01 0.91	5 0.729 2 0.712 2 0.707	0.576 0.603 0.610	0.436	2.349 >5	0.204	7 5 35	0.807	2 0.979 7 0.908 2 0.889	0.981 0.8 0.747 0.9 0.789 0.7	909 1.103	3 0.922 3 1.138 1 1.056	0.703	0.543 >5	0.940	5 5 20	1.222 2.255 1.987	1.112 2.182		1.614	0.992 1.272 1.079	1.155	>5 >5	NA NA NA
IPI00219628 PRKCB1 IPI00329236 PRKCD IPI00029196 PRKCQ	PKCd PKCt	265 26 497 56	6 2 1.054	1.164	1.060 0.7	33 NA	0.646	NA	0.442	>5 >5 1.611	NA 0.025 0.209	35 3 16	NA	NA	NA 0.6	559 NA	0.815	NA (0.496 4.430	0.829 NA	4 12	1.987 1.079 1.296	0.980 1.154	1.284	0.998	0.903 0.899	0.765	>5 >5	NA NA
IPI00029136 PRKD2 IPI00015538 PRKD3	PKD2 PKD3	332 30 173 10	0 3 1.004 0 1 NA	0.962 NA	0.882 0.7 0.728 0.8 1.023 1.0	68 0.83 18 0.68	9 0.814	0.604	0.653	>5	NA 0.079	4 0	1.402 NA	0.920 NA	0.956 0.8 1.588 1.1	123 0.967 IA NA	7 1.216 NA	0.816 (0.658 >5 NA >5	NA NA NA	4	1.263 NA	0.975	1.085		0.684	0.886	>5 >5	NA NA
IPI00296337 PRKDC IPI00028004 PSMB3	DNAPK	3107 125 45 2			1.023 1.0 0.848 0.8 NA N					>5 >5	0.565 NA	76 1	1.009 NA	0.926 NA	NA 11	130 NA	1 483	NA (0.692 >5	NA NA	29 0	1.153 NA	1.088 NA	1.176	1.098	0.826 NA	0.852	>5 >5	NA NA
IPI00375380 PSMD13 IPI00384051 PSME2		57 2 58 5	2 1 1.070 5 1 NA	0.802 NA	1.034 N NA 1.0 0.808 0.5 1.400 0.8	A NA 59 NA	. NA . 1.031	NA NA	NA 0.543	>5 >5	NA NA	1 1	NA NA	NA NA	1.440 N NA N 1.015 0.2 1.016 N	IA 1.724 IA NA	4 NA 0.571	1.336 NA (NA >5 0.567 >5	NA NA	1	1.510 NA	NA 0.605	NA NA	0.542	0.525 NA	NA 0.544	>5 >5	NA NA
IPI00170554 PSTPIP2 IPI00183626 PTBP1		413 27 187 9	7 10 1.002 9 2 1.016	0.918 1.103	0.808 0.5 1.400 0.8	23 0.46 35 0.71	3 0.297 8 0.808	0.234 0.394	0.207	0.057 0.907	0.031 0.136	2 2	1.052 1.129	2 1.143 9 1.191	1.015 0.2 1.016 N 0.913 1.0	255 NA IA 0.844	0.322 4 1.280	NA 0	0.162 0.018 0.458 1.452	0.015 1.000	11 0	0.791 NA	0.844 NA	0.971 NA	1.155 NA	0.935 NA 0.849	1.034 NA	>5 >5	NA NA
IPI00413961 PTK2 IPI00029702 PTK2B	FAK PYK2	3012 363 2312 220								1.256 1.956	0.572 0.980	163 69	1.110	0.987	0.913 1.0)42 0.953	3 1.019	0.808 1 (0.717 I >5	NA NA	116 76	1.103	0.989	1.071	0.945	0.853	0.774	>5 >5	NA NA
IPI00219132 PTPN18 IPI00329200 RANBP5 IPI00026262 RASGAP		206 13 137 3 120 12	3 2 NA 7 2 1.480	1.281	0.941 0.7 0.671 0.5 1.307 1.0 0.470 0.3 1.105 0.7	57 1.56	2 0.911	1.863	0.218	0.075 >5 0.009	0.045 NA 0.005	3 0	1 084	0.610	0.971 0.5	IA NA 530 0.75	1 0.644	0.887 (NA >5 0.497 >5	NA NA NA	2	0.707 0.697 0.868	0.904 0.831 0.845	0.756	0.630	0.821 0.423 0.775	0.580	>5 >5	NA 0.086 1.121
IPI00026262 RASGAP IPI00465044 RCC2 IPI00607634 RGPD1		148 12 152 15	2 4 0.917	1.199	1.105 0.7 0.801 N	72 NA	0.820 NA	NA NA	0.790 NA	>5	NA NA	6	NA 1 021	NA 1 1.525	NA N 1.320 0.8 1.323 N	337 1.672	2 0.914 NA	0.761 (0.485 3.356 NA >5	1.053 NA	2	1.292 NA	0.667 NA	1.293	0.584	1.006 NA	0.545	>5 >5	0.188 NA
IPI00021917 RIPK2 IPI00397801 RP1-14N1 3	RIPK2	1532 159 214 4	9 87 1.026 4 0 NA	0.961 NA	0.962 0.8 NA N	43 0.80 A NA	3 0.778 NA	0.610 NA	0.565 NA	>5 >5	0.317 NA	46	1.027		0.851 0.4	146 0.514 IA 0.742	4 0.329 2 NA	0.329 (0.190 0.047 NA 0.566	0.019 NA	61	1.147 NA	0.922	1.212	0.973	0.897	0.854	>5 >5	NA NA
IPI00387164 RPS27A IPI00477982 RPS6KA1	RSK3	214 16 2320 260	6 6 0.992 0 93 0.926	0.928	0.962 0.8 NA N 0.854 0.7 0.875 0.8	49 NA 03 0.75	0.605 5 0.709	0.614 0.613	0.319	1.199	0.986 NA	4 88	0.950	0.975	0.994 N 0.824 0.9	IA NA 924 0.970	NA 0 1.006	NA 0.780	NA >5 0.642 >5	NA NA	5 66	NA 1.172	0.927	NA	0.985	NA 0.850	0.899	>5 >5	NA NA
IPI00300321 RPS6KA2 IPI00020898 RPS6KA3	RSK1 RSK2	558 56 1280 130	6 2 0.965	0.878	0.890 0.8	95 I 0.80	8 0.773	0.582	0 628 T	>5 >5	0.252 0.123	2 8	1.136	1.176	0.665 N 0.665 0.9	IA 1.044	4 NA 3 0.954	0.678	NA >5 0.620 >5	NA NA	2 12	0.955 1.118	0.953 1.028	1.057	1.286	0.869	1.012	>5 >5	NA NA
IPI00021187 RUVBL1 IPI00013895 S100A11		49 1 46 1 56 1	2 0 NA 2 1 NA	NA NA	0.972 0.7 NA N NA 0.5 NA N	A NA 44 NA	NA 0.597	NA NA	NA 0.538	>5 >5	NA NA	0	NA NA	NA NA	NA 0.5 NA N 0.390 N	590 NA IA NA	1.127 NA	NA (0.751 >5 NA >5	NA NA	0	NA 1.284	NA NA	NA 1.151 NA	NA NA	NA 1.266 NA	NA NA	>5 >5	NA NA
IPI00007047 S100A8 IPI00003734 SBSN		63 2	2 0 NA	NA.	NA N	A NA	. NA	NA	NA	>5 >5	NA NA	0	NA	NA NA	NA N	IA NA	NA	NA	NA >5	NA NA	1	NA NA	0.310	NA I				>5 >5	NA NA
IPI00305166 SDHA IPI00375370 SEC13L1 IPI00218466 SEC61A1		90 3 166 8 206 6	3 1 1.182 8 3 0.700 6 4 0.889	0.958	1.139 N 0.854 1.0 0.931 0.7	52 1.22	9 0.662	0.830	0.506	>5 >5	NA 0.221 NA	1 4 3	1.297	0.981 7 1.630 5 1.219	0.985 N 2.686 N 1.216 0.8	IA 0.917	7 0.946	1.032 (NA >5 0.626 >5	NA NA NA	3	NA 1.729 NA	0.813 NA	1.625 NA	1.092 NA	NA 1.259 NA	NA 1.040 NA	>5 >5	NA NA NA
IPI00027444 SERPINB1 IPI00072377 SET		38 2 141 8	2 1 1.073	1.267	1.396 0.7 1.277 0.8	19 NA	0.686	NA	0.577	>5	0.029 NA	1 3	1.072	1.150	1.014 N 1.426 1.1	IA 1.283	3 NA 2 1.053	0.857	NA >5	NA NA	1 1	NA 1.026	1.144	NA	1.219	NA 0.601	1.219	>5	NA NA
IPI00010740 SFPQ IPI00021326 SHC1		135 11	1 2 0.700	0.702	0.033 0.0	CO NIA	0.702	NIA	0.601	>5 0.340	0.032	1 3	NA	NA	0.656 N	A 1.478	8 NA	1.051	NA >5	NA NA	3 4	0.909	0.925	1.055 0.942	0.992	0.807 0.672	0.867	>5 1.987	NA
IPI00002191 SIAHBP1 IPI00234463 SIMILAR TO		316 29 58 5 576 5	1 0 NA 1 2 0.645	NA 0.575	0.688 0.5 NA N 0.634 N 1.390 N	A NA	NA NA	NA NA	NA NA	>5 >5	NA NA	0 3	NA	NA	0.538 N NA N NA N	IA NA	1.571	NA (NA >5 0.850 >5	NA NA	1 17	NA 1.135	0.739 NA	1.062	1.264 NA	NA 0.969	1.288 NA	>5 >5	0.306 NA NA
IPI00258965 SIMILAR TO IPI00097175 SIMILAR TO		67 3 55 2	3 2 1.238 2 0 NA	1.252 NA	1.390 N NA N	A NA	NA NA	NA NA	NA NA	>5 >5	NA NA	0	NA 1.514	NA 1.298	NA N 1.655 N	IA NA	NA NA	NA NA	NA >5 NA >5	NA NA	0	NA NA	NA 0.574	NA NA	NA 0.966	NA NA	NA 0.479	>5 2.540	NA NA
IPI00047508 SIMILAR TO IPI00047744 SIMILAR TO		42 3 58 4 51 3	0 NA 4 0 NA	NA NA	NA N	A NA	NA NA	NA NA	NA NA	>5 >5	NA NA	1	NA 1.181	NA 1 1.016	1.008 N	IA 0.840	0 NA NA	0.819 NA	NA >5 NA >5	NA NA	0	NA NA	NA NA	NA NA	NΑ	NΑ	NA NA	>5 >5	NA NA
IPI00082894 SIMILAR TO IPI00022202 SLC25A3		51 3 240 16 196 17	0 NA 6 6 0.975	0.953	NA N NA N NA N NA N 0.927 0.7	48 0.83	NA 1 0.562	0.564	NA 0.745	>5 >5	NA 0.036	6	0.836	NA 6 0.931	NA N 1.006 N	IA NA IA 1.028	1.080 8 1.012	0.914 (0.698 >5 0.533 >5	NA 9.490	5	NA 0.936	NA 1.020	NA 0.985	1.051	NA 0.803	NA 0.796	>5 >5	NA NA
IPI00554481 SLC3A2		44 2								>5 0.596	0.097 NA NA	5 0 4	NA	0.996 NA 4 0.865	0.855 0.8 NA N	IA NA	8 0.770 NA	NA NA	0.578 >5 NA >5	0.369 NA NA	0	1.201 NA NA	0.980 NA NA	1.255 NA NA	NA NA	0.921 NA NA	0.804 NA NA	>5 >5 >5	NA NA NA
IPI00008986 SLC7A5 IPI00022827 SLK IPI00465291 SNF1LK2	SLK	273 1 434 35 723 56	7 7 0.788 5 5 1.019	0.940	0.830 N 0.980 N 0.846 0.7 0.791 0.5	01 0.46	0 0.608	0.156 0.258	0.332	>5 0.151 0.045	0.055 0.024	6	0.888	0.865 3 1.173 1 1.046	NA N 0.849 N 0.866 0.7 0.659 0.3	747 1.019	NA 9 0.924 5 0.278	0.802 (0.196 (NA >5 0.544 >5 0.170 0.020	1.212 0.013	9	1.144 1.104	1.183 0.908	1.027	0.898	0.707 0.871	0.630	>5 >5	NA NA NA
IPI00463291 SINF IERZ IPI00017469 SPR IPI00328867 SRC	SRC	320 16 1622 164	6 7 0.946 4 34 1.000	0.989	0.873 0.7	66 0.83	0.798	0.522	0.569	>5 0.057	0.024 0.349 0.026	6 25	0.867	7 0.932	0.916 0.7	788 0.994	4 0.911	0.618 0	0.547 >5 0.123 0.007	0.759 0.006	6 39	1.203	0.967	1.192	1.018	0.965	0.742	>5 >5	NA NA
IPI00477842 SRP46 IPI00642816 SRP9		76 5 64 6	5 0 NA 6 1 1.296	NA 1.111	NA N 1.198 1.6 0.942 0.8 0.753 0.7	A NA	NA 0.550	NA NA	NA 0.425	>5 0.376	NA 0.249	1 0	0.753 NA	3 1.048 NA	0.999 N NA N	IA NA	NA NA	NA NA	NA >5 NA >5	NA NA	0	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	>5 >5	NA NA
IPI00306833 STK16 IPI00477195 STOML2	MPSK1	141 1°	1 2 1.074 3 2 0.873	1.029 0.936	0.942 0.8 0.753 0.7	52 0.84 01 NA	7 0.822 1.175	0.503 NA	0.678	>5 >5	0.084 0.126	4	NA NA	NA NA	0.999 N NA N 0.617 0.8 NA 1.1	384 1.138 124 NA	8 0.969 1.941	0.744 (NA	0.595 >5 1.198 >5	0.992 NA	3 2	NA 1.003	1.080 NA	NA 1.553	1.279 NA	NA 0.890	1.029 NA	>5 >5	NA NA
IPI00154910 STS-1		1226 115	5 26 1.144	0.933	0.330 0.2	05 0.16	2 0.174	0.114	0.116	0.006	0.005	22	1.154	0.694	0.309 0.1	188 0.228	8 0.205	0.168	0.147 0.002	0.002	37	0.730	0.607	0.682	0.443	0.310	0.223	0.217	0.675

								bos	utinib								dasat	inib								imatir	nib			
IPI acc. no.	Protein	Kinase	highest Mascot	highest SSM	highest SSM used for	0.0001 0.001	kinobeads bino			1.0 5.0	[cpd] causing 50% binding reduction	[cpd] at inflection poin	highest SSM used for	0.0001		inobeads bindin		o vehicle at	5.0	[cpd] causing 50% binding reduction	[cpd] at inflection point of	highest SSM used for	0.01	kinobea	ds binding	relative to	vehicle at	5.0	[cpd] causing 50% binding	[cpd] at inflection
IPI00221222	SUB1		score 141	1 0	quantification	uM uM 1.175 0.923	uM u	M uN	uM	uM uM 0.482 0.500	(uM) 0.022	of curve (uM) 0.018	quantification	uM	uM 0.999	uM uM 0.798 1.309		uM uM	uM.	(uM)	curve (uM)	quantification	uM 0.808	uM 0.668	uM 0.582	uM 0.612	uM 0.958	uM 0.424	reduction (uM)	(uM) 0.418
	SURF4		192	2 4	3	1.192 1.063		A 0.76	6 NA	0.401 NA	0.463	0.181	4		1.250	1.393 NA	NA	0.502 NA	0.406		0.191	0	NA	NA	NA	NA	NA	NA NA	>5	NA
	SYK	SYK	1012			0.857 1.020		33 0.32	3 0.239	0.195 0.167	0.017	0.013	17		0.835	0.530 0.303			6 0.185		0.005	25	0.952	0.883	1.104	1.070	0.760	0.755	>5	NA
IPI00299166 IPI00002232	TANK TANK1	TAO1	701 184			1.048 1.073 NA NA	0.970 0.8				1.740 3.146	0.796 1.033	23	1.032 NA		1.213 0.960 NA NA			0.722	>5	NA NA	21	0.911	0.871 NA	0.962	1.012 NA	0.825	0.835 NA	>5 >5	NA NA
IPI00465168	TAOK2	TAO2	243	3 20	7	1.055 1.017		A 0.76		0.483 NA	0.295	0.100	5	1.073	1.145	0.870 1.008					NA NA	3	1.216	1.156	1.370	1.220	0.944	0.927	>5	NA
IPI00410485	TAOK3	TAO3	244				0.862 0.9			0.725 0.731	>5	NA	5	0.908		0.984 0.814			0.597	>5	0.656	2 144	1.580	1.486	1.243	1.228	1.175	1.065	>5	NA
	TBK1 TBKBP1	TBK1	3207 857				0.932 0.8				1.039	0.695	202 17	1.114		0.989 0.936 1.074 1.049			2 0.677 4 0.635		NA NA	144	1.094	0.835	1.122	1.004	0.855 0.744		>5 >5	NA NA
IPI00000878	TEC	TEC	2570	279	127	0.988 0.946	0.704 0.5	72 0.53	4 0.481	0.383 0.354	0.121	0.013	75	1.046	0.960	0.558 0.458	0.390	0.235 0.20	6 0.131		0.014	116	0.926	0.895	0.990	0.942	0.706	0.660	>5	NA
	TESK1 TESK2	TESK1 TESK2	39 317		7	0.956 1.291	0.847 N			NA NA 0.710 0.562	>5 >5	NA 0.122	0		NA 1.247	NA NA 0.855 0.703	NA		NA 8 0.326	>5	NA 0.102	0	NA 1.072	NA 1.014	NA 1.093	NA 0.969	NA	NA 0.843	,5	NA NA
IPI00102677 IPI00005733		TGFbR1	317				0.945 0.6				>5 >5	0.122	5 7	1.029		0.855 0.703			8 0.326 5 0.478		1.107	7 9	1.072		1.093	1.036	0.893	0.843	>5 >5	NA NA
IPI00164934	TGFBR2	TGFbR2	86	6 9	1	0.906 0.918	1.035 N	A 0.76	2 NA	0.398 NA	0.206	0.124	2	NA	NA	NA 0.749	NA NA		0.423		NA	2	NA	1.153		1.035	NA	0.594	>5	NA
	THOC4 TKT	1	62 91		0	NA NA		A NA		NA NA	>5 >5	NA NA	1	NA NA	NA NA	NA 0.971 1.109 1.003		0.871 NA 1.356 0.99	0.594		NA NA	1	1.117	1.274 NA	1.067 0.901	1.039 NA	0.695	1.208 NA	>5 >5	NA NA
IPI00021716 IPI00298994		 	102		3		NA NA 0.4		NA 0.841		>5 1.618	NA NA	2	NA NA		1.109 1.003			0.680		NA NA	2			1.448	1.482	1.631	1.129	>5 >5	NA NA
IPI00145805	TNIK	ZC2_TNIK	343	3 36	3	1.102 0.990	0.859 N	A 0.77	6 NA	0.657 NA	>5	NA	8	0.807	0.862	0.955 0.913	0.865		3 0.431		4.884	6	1.099	1.014	1.602	1.048	1.239	0.837	>5	NA
	TNK1	TNK1	779 435				0.984 0.7		2 0.755	0.570 0.586	>5	0.082	22	1.029	1.242	0.963 0.986			0.673		NA 0.000	20	1.201	0.988	1.172	1.037	0.942	0.924	>5	NA NA
IPI00465028	TNK2 TPI1	ACK	121	1 9	10 3	1.044 1.063 1.066 1.286	0.879 0.5 1.209 0.6	75 0.61 54 0.99		0.349 0.267 0.642 0.776	0.162 >5	0.039 NA	3	1.081 NA		0.809 NA 0.781 0.998	0.582		9 0.201	0.202	0.092 NA	3	1.335	1.034	1.283	0.977	0.955 1.137	0.833	>5 >5	NA NA
IPI00027230	TRA1		209	9 13	2	NA NA	NA 0.7	28 NA	0.751	NA 0.605	>5	NA	4		NA	NA 0.877	NA.	1.088 NA	0.647		NA	3	1.241	NA		NA	0.949	NA	>5	NA
	TRAF2 TRIM59		486 145		10	1.095 1.167 NA NA	0.888 0.7 NA 0.6			0.469 0.344 NA 0.439	0.904 2.575	0.329 NA	16	0.732	0.649	1.006 0.882 1.080 NA			6 0.653 3 NA	>5	NA NA	8	1.021 NA	1.154	1.118 NA	0.992	0.842 NA	0.942	>5 >5	NA NA
	TRIP4		60		1	1.652 1.176				NA NA	>5	NA NA	0	NA		NA NA	NA		NA NA	>5	NA NA	0	NA NA	NA	NA NA	NA	NA NA	NA	>5	NA NA
IPI00550503	TTC14		55	5 5	0		NA N	A NA	NA	NA NA	>5	NA	1	NA	NA	NA NA	NA	0.940 NA	0.526		NA	0	NA	NA	NA	NA	NA	NA	>5	NA
IPI00179709 IPI00387144	TUBA2		691 1309		0 65	NA NA	NA N 1.019 0.9			NA NA 0.617 0.643	>5 >5	NA NA	1 61	NA 1.068		NA NA 1.191 0.988			NA 7 0.631	>5 >5	NA NA	42	1.112	NA 0.910	1.239	NA 1.050	0.842	NA 0.856	>5 >5	NA NA
IPI00387144	TUBB		1371		61	1.096 0.966				0.609 0.514	>5	0.223	19	0.984	0.937	1.037 0.845	1.049		9 0.550	>5	0.864	43	1.187	0.910	1.124	1.030	0.797	0.817	>5	NA NA
IPI00655896	TUBB4		1154	4 126	9	1.085 0.947				0.480 0.639	>5	0.006	8		0.821	1.216 0.828	1.077		3 0.536		2.029	8	1.030	0.939	1.155	1.041	0.761	0.749	>5	NA
IPI00027107 IPI00470779	TUFM		82 65				0.867 N 0.333 N		NA 8 NA	NA NA 0.165 NA	>5 >5	NA NA	0	NA NA	NA NA	1.148 0.700 NA NA			6 0.654 NA	>5	0.411 NA	1	0.902 NA	NA NA	1.523 NA	NA NA	1.178 NA	NA NA	>5 >5	NA NA
	TXN		75		3	NA NA				0.707 0.705	>5	NA NA	2	NA		0.872 1.163			7 1.099		NA	2	0.569	0.918	1.015	1.068	0.762	0.719	>5	0.063
	TXNDC		108	B 6	3	1.006 1.105		47 0.54		0.521 0.728	>5	0.032	2	NA	NA	1.371 1.090				>5	NA	3	1.216	0.893	1.184	0.970	0.891	0.739	>5	NA
IPI00022353 IPI00328348	UBA52	TYK2	1745	5 124 0 14		NA NA	0.835 0.8 NA N	15 0.83 A NA	0.775 NA	0.580 0.543 NA NA	>5 >5	0.448 NA	45 3	1.001 NA		0.917 0.961 0.904 NA			8 0.486 1 NA	3.185	1.067 NA	48	1.176 0.855	0.952 NA	1.149 0.884	0.962 NA	0.926	0.767 NA	>5 >5	NA NA
IPI00411818	ULK3	ULK3	816				0.960 0.7			0.577 0.450	2.445	0.494	25	1.010		0.983 0.917			6 0.685		NA NA	17	1.160	0.992		1.068	0.900	0.911	>5	NA NA
	VARSL		141		3	1.023 1.103	0.962 N			NA NA	>5	NA NA	2	2.672	1.802	1.402 NA				>5	NA	0	NA	NA	NA NA	NA	NA 1.000	NA 0.740	,5	NA
IPI00478540 IPI00418471	VCP		238	8 17	6	NA NA 0.925 0.952			0.704 3 NA	NA 0.449 0.601 NA	1.124	NA NA	6	NA 0.853	NA 0.824	1.569 1.752 1.485 1.118			5 1.045	>5 >5	NA NA	3	1.291	0.825 NA	1.152	0.953 NA	1.038	0.716 NA	>5 >5	NA NA
	WDR68		168	8 8	3		1.018 0.7	62 1.02	0 0.626	0.747 0.658	>5	NA	3	NA		1.102 0.986			7 0.541	>5	0.836	4	1.004	1.165	1.311	1.054	0.980	0.912	>5	NA
	WEE1 XPO1	Wee1	1389		49 8	1.057 1.067 0.894 1.092	0.970 0.8 0.926 N		1 0.667 NA	0.500 0.384 NA NA	1.110	0.205 NA	52 6	1.069 0.857		0.942 0.908 0.968 1.195	1.071 NA	0.946 0.68	0.462	2.307 4.723	0.870 4.845	39	1.067 NA	0.919 NA	1.133 NA	0.985 NA	0.823 NA	0.763 NA	>5 >5	NA NA
	XPO5		197		4		1.200 N			NA NA	>5 >5	NA NA	4	1.089		1.210 NA			7 NA		4.045 NA	2	1.178	0.907	1.049	1.049	0.827	0.913	>5	NA NA
IPI00302458	XPO7		84	4 7	2	0.827 0.860	0.958 0.6	89 NA	0.945	NA 0.545	>5	0.597	2	0.983	1.019	0.877 NA	NA	1.485 NA	1.254	>5	NA	0	NA	NA	NA	NA	NA	NA	>5	NA
	XPOT XRCC5		101		0	1.459 1.576 NA NA				0.636 NA NA NA	>5 >5	NA NA	2	NA NA	NA NA	NA 0.709 NA 1.538			0.736		NA NA	0	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	>5 >5	NA NA
	XRCC6		232		1	1.137 0.751				NA NA	>5	NA NA	6	NA	NA	NA 1.435			0.770		NA NA	2	2.039	NA	1.621	NA	1.371	NA NA	>5	NA NA
IPI00008536	YEATS4	V/E0	61	1 5	1	NA NA	1.157 N	A 0.87	5 NA	0.720 NA	>5	NA	1		NA	0.818 0.808	0.892	0.876 0.72	6 1.026	>5	NA	1 50	1.916	1.410	1.696	0.897	0.900	1.099	>5	NA
	YES1 YWHAR	YES	1650 345				0.781 0.6			0.225 0.178 NA 0.450	0.096 0.042	0.058 0.027	29	0.910 NA		0.450 0.248 NA NA			0.151		0.005 NA	52 1	1.345 0.982	1.174	1.408	1.124	0.964	0.977 0.802	>5 >5	NA NA
IPI00000816	YWHAE		498	8 37	12	0.991 0.978	0.602 0.5	07 0.52	5 0.441	0.313 0.292	0.056	0.008	11	0.824	0.721	0.688 0.617	0.659	0.601 0.44	7 0.331	0.553	0.320	13	0.938	0.812	0.940	0.751	0.562	0.545	>5	0.407
	YWHAG YWHAH		578 341	8 40	15	1.048 0.916	0.612 0.4 0 0.627 N	25 0.46		0.319 0.247 0.204 NA	0.026 0.014	0.008	10	1.038	0.882	0.725 0.548			0.229	0.110	0.031	10 5	0.942	0.744	0.885	0.715 0.736	0.544	0.523	>5 >5	0.360 0.481
	YWHAH YWHAQ	 	341				0.627 N 0.793 0.4				0.014	0.011	4	1.127		0.607 0.508			5 0.377		0.004	5	0.955		0.846	0.736	0.580	0.501	>5 >5	0.481
IPI00180776	YWHAZ		659	9 49	14	1.093 1.026	0.733 0.4	97 0.57	8 0.413	0.387 0.233	0.079	0.023	12	0.846	0.849	0.791 0.764	0.834	0.667 0.55	3 0.376	2.119	1.833	11	0.971	0.844	0.847	0.675	0.636	0.569	>5	0.107
	ZAK	ZAK	797	7 107	28	0.939 0.970				0.327 0.269 0.749 NA	0.329	0.180 NA	26 0	0.980 NA		0.903 0.894			4 0.254		0.231 NA	18	1.124	1.015	1.200	1.057	0.882 NA	0.824 NA	>5 >5	NA NA
IPI00386679	ZNF607	 	52	4 2	1	NA NA	0.879 N	A 0.84	3 NA	0.749 NA	>5	NA NA	U	NA	NA	NA NA	NA	NA NA	NA.	>5	NA	U	NA	NA	NA	NA	NA	NA	>5	NA
	ses with confidence																								L					
IPI00003431 IPI00291665		Erk3 TBCK	171		0	NA NA		A 0.74 A NA	5 NA NA	0.610 NA NA NA	>5	NA NA	0	NA NA	NA NA	0.946 NA NA NA			0.830 NA	>5	NA NA	0	NA 1.154	NA NA	NA 1.172	NA NA	0.496	NA NA	>5 0.956	NA NA
IPI00031016	JAK2	JAK2	146	6 10	0	NA NA	NA N	A NA	NA	NA NA	>5	NA	Ö	NA	NA	NA NA	NA	NA NA	NA.	>5	NA	1	1.438	NA	0.859	NA	0.756	NA	>5	NA
IPI00219800	MAP4K4	ZC1_HGK	104	4 10	0	NA NA	NA N	A NA	NA	NA NA	>5	NA	0	NA	NA	NA NA	NA	NA NA	NA.	>5	NA	1	0.898	NA	1.059	NA	0.745	NA	>5	NA
	MYLK BRD2	smMLCK BRD2	95		0	NA NA				NA 0.476 NA NA	3.108	NA NA	0	NA NA	NA NA	NA NA			NA NA	>5 >5	NA NA	0	NA NA	NA 0.552	NA NA	NA 0.679	NA NA	NA 0.637	>5 >5	NA NA
IPI00023529	CDK6	CDK6	69	9 12	1	0.687 0.734	0.687 N	A NA	NA	NA NA	>5	NA	Ö	NA	NA	NA NA	NA	NA NA	NA.	>5	NA	1	NA	1.042	NA	0.976	NA	0.807	>5	NA
	ALPK3	AlphaK1	54		0	NA NA				NA NA	>5	NA	1		NA	NA NA			0.025		NA	0	NA	NA	NA	NA 1010	NA	NA 0.005	>5	NA
	CDK10 CSNK1G2	CDK10 CK1g2	53		1		1.149 N			0.783 NA NA NA	>5 >5	NA NA	1	1.129 NA		1.424 NA NA NA			NA NA	>5 >5	NA NA	1	0.978 NA	0.939	0.978 NA	0.862	0.630 NA	0.665	>5 >5	NA NA
IPI00235407	STK36	Fused	42	2 7	Ö	NA NA	NA N	A NA	NA	NA NA	>5	NA	Ö	NA	NA	NA NA	NA	NA NA	NA.	>5	NA	1	1.106	NA	1.144	NA	1.006	NA	>5	NA
	IGF1R PRPF4B	IGF1R PRP4	41		0	NA NA	NA N	A NA	NA NA	NA NA	>5 >5	NA NA	0	NA NA	NA	NA NA 0.806 NA	NA 0.202	NA NA NA 0.32	NA 2 NA	>5 0.060	NA NA	1	0.944 NA	NA NA	0.977 NA	NA NA	0.784 NA	NA NA	>5 >5	NA NA
	CDK8	CDK8	26		1		0.799 N				>5 >5	NA NA	0			NA NA			NA NA	>5	NA NA	0	NA NA		NA NA	NA NA	NA NA	NA NA	>5 >5	NA NA

	Abbreviations: SSM; numb	aber of spectrum-to-sequence matches, NA; not available.		bosutinib applied to lysate	bosutinib applied to cultured cells dasatinib applied to lysate	dasatinib applied to cultured cells	imatinib applied to lysate imatinib applied to cultured cells
	IPI acc. no. Protein	in Knisse Phospopeptide sequence si pe	er of modifical possible tocation of possible tocation of source distribuse of known p-site postion in modification parties in positions in protein positions in protein positions in protein protein positions in protein pro		knobeads binding relative to vehicle at used for funderads binding relative to vehicle at used for quantitation quantitation.	or kinobeads binding relative to vehicle at used for quantitatio	kinobeads binding relative to vehicle at used for quantitation quantitation
	IPI00328846 FAM83A	FTGQAVELFDEEFRHLYASSKPVMGLKSPR	1 171/00	0.01 uM 0.03 uM 0.1 uM 0.3 uM 1 uM 10 uM	0.01 kM 0.03 kM 0.1 kM 0.3 kM 1 kM 5 kM 0.01 kM 0.3 kM 1 kM 0.3 kM 1 kM 0.3 kM 1 kM 0.3 kM 1 kM 10 kM 1 kM 10 kM 1 kM 10 kM 1 kM 1	0.01 uM 0.03 uM 0.1 uM 0.3 uM 1 uM 5 uM 1.182 0.518 1.149 1.128 0.945 0.808 Y	0.01 uM 0.03 uM 0.1 uM 0.3 uM 1 uM 10 uM 0.01 uM 0.01 uM 0.3 uM 0.1 uM 0.3 uM 1 uM 5 uM 1.22 1.147 0.004 0.054 0.055 Y 0.00 NA 0.86 NA 1.100 NA N
	IP100328846 FAM83A IP100029263 FER IP100029263 FER	SVSASSGPCSPAAPHPPPPPR	2 3810 3508357 1 8 402 402 UNIPROT	46 11 15 0.703 0.892 1.02 1.02 1.037 0.037 7 3 38 10 14 1.255 NA 1.464 NA 0.728 NA N 59 24 93 1.117 1.113 0.954 0.91 0.444 0.163 Y 9 13 17 NA NA NA NA NA NA NA NA	NA N	1.116 NA 1.859 NA 1.203 NA N 0.727 0.718 0.673 0.542 0.869 0.556 Y 0.796 0.841 0.593 0.93 1.067 0.874 Y	0.500 Feb. 0.505 Net 4.0-4 No. N. No. No. No. No. No. No. No. No.
	IP100029263 FER IP100029263 FER IP100005142 FGFR1	FER QEDGGYYSSSGLK FER SVTSMERK FGFR1 PLQAGLPANKTVALGSNVEFMCK	1 4 411	81 24 88 1.174 1.285 1.044 1.084 0.636 0.234 Y 8 14 18 1.348 1.201 1.138 0.819 0.471 0.208 Y 31 5 6 0.704 NA 1.086 NA 0.781 NA N	0.548 0.465 0.353 0.363 0.157 0.032 Y 1,000 1,057 0.914 0.523 0.723 0.855 Y 0.953 NA 0.8645 NA 0.228 NA Y 0.959 1,615 0.781 1,379 0.825 1,062 Y 0.988 0.875 0.705 0.898 0.205 0.573 N 0.862 NA 0.865 NA 0.522 NA N	0.624 0.498 0.459 0.407 0.481 0.384 Y 0.418 1.213 0.651 0.756 0.513 0.55 Y NA 0.534 NA 0.839 NA 0.515 N	1.865 1.841 1.100 1.046 0.886 0.719 Y 0.81 0.884 0.09 1.228 1.141 0.903 Y 1.016 0.962 0.985 1.373 0.985 0.533 Y 0.799 NA 0.674 NA 0.574 NA Y NA
	IP100219012 FYN IP100219012 FYN IP100219012 FYN	FYN DGSLNDSSGYR FYN KDPERPYTEYLOSFLEDYFTATEPQYQPGENL FYN KLDNGGYYTTR FYN LIENBEYTAB		59 18 48 0.841 0.84 0.501 0.303 0.13 0.105 Y 55 11 11 1.972 1.02 1.554 0.76 0.805 0.276 N 51 7 18 NA NA NA NA NA NA NA NA	0.147 0.096 0.085 0.085 0.081 0.033 Y 0.828 0.489 0.377 0.194 0.184 0.143 Y NA 0.257 NA 0.267 NA 0.189 N 0.44 0.185 0.31 0.185 0 N NA N	NA N	1.175 0.773 1.112 1.02 0.283 0.685 Y 1.34 0.537 1.744 1.019 1.373 0.788 Y 1.181 0.023 0.0255 0.734 1.406 0.624 N NA N
	IPI00219012 FYN IPI00219012 FYN IPI00012442 G38P	PYN LITELSYK SILDOSSGYR FYN LITEERDGSLINGSSGYR SSSPAPADAIQTYQEDLR	1 2 253 1 8 20 20 UNIPROT 1 1203 200231252 250 231 252 PhosphoF M PhosphoF M IMIPROT	20 15 17 0.726 1.721 0.992 1.489 0.737 1.598 Y 36 12 15 NA 0.662 NA 0.605 NA 0.26 N 51 2 2 NA NA NA NA NA NA NA NA	NA 0.617 NA 0.575 NA 0.593 Y 0.971 0.981 0.87 0.918 0.754 0.889 Y 0.418 0.467 0.341 0.631 0.132 0 N 1.425 NA 0.551 NA 0.139 NA	0.741 0.963 1.285 0.672 0.635 1.1 Y NA 0.426 NA 0.233 NA 0.201 N NA NA NA NA NA NA NA N	0.508 1.14 0.947 0.755 0.485 0.841 Y 0.889 NA 0.935 NA 0.884 NA Y 0.809 0.834 0.813 0.997 1.244 0.889 Y 1.091 1.786 1.06 1.882 1.122 2.079 Y NA
	IP100298949 GAK IP100298949 GAK IP100298949 GAK	GAK DESEVSDEGGSPISSEGGEPR GAK ESESALMEDRDESSYSDEGGSPISSEGGEPR GAK ESESALMEDRDESSYSDEGGSPISSEGGEPR SLOPAL DES ASSEGGEPR SLOPAL DES ASSEGGEPR	2 3,6 8268629 1 13/16/21 826/829/834	60 4 4 NA	NA N	NA N	NA 3.612 NA 0.680 NA 0.302 N NA 1.574 NA 1.066 NA 0.673 N NA N
		EVSSRPSTPGLSVVSGISATSEDIPNKIEDLR EVSSRPSTPGLSVVSGISATSEDIPNKIEDLR	1 7 761 2 73 8 761 751762		1.449 NA 3.06 NA 0.788 NA N NA N	NA NA NA NA NA NA	NA. NA
	IP100478128 GATAD2A IP100217952 GFPT1 IP100180434 GRAMD1A	VTPEPGAGPTOGLERATEATAMAMGR VDSTTCLPPVEEK AGHTSGSLSSR	2.2810 68876 1 34 261[262 261 LINIPROT 1 58 700[710	33 1 1 NA	NA O. 2020 NA 0.127 NA 0 NA N 0.541 7.398 0.24 2.003 0.384 3.037 N 0.87 0.81 1.028 0.794 0.82 0.388 N 0.837 0.642 0.46 0.541 0.506 0.256 Y NA 0.864 NA 1.072 NA 0.617 N	NA N	NA N
	IP100180434 GRAMD1A	EVGDVIALSDITSSGAADRSQEPSPVGSRR		63 14 14 0.236 0.889 1.777 1.191 1.432 0.435 N 54 19 51 1.187 0.351 1.837 0.719 1.117 0.451 N 35 3 3 NA NA NA NA NA NA NA NA 20 22 72 1897 1848 208 1898 1979 1079 107	NA N	NA 0.547 NA 1.005 NA 0.286 N 0.928 0.884 0.836 1.131 0.822 0.723 Y NA NA NA NA NA NA NA N 1.719 1.441 1.901 2.304 1.005 0.801 Y	1.412 NA 0.942 NA 1.76 NA N 0.338 1.23 0.635 1.146 1.738 1.295 N 1.375 1.734 1.194 1.090 1.124 0.765 Y 1.875 0.295 0.294 2.291 1.519 0.784 N 0.903 NA 1.257 NA 0.595 NA N NA N
Second State	IPI00180434 GRAMD1A IPI00180434 GRAMD1A IPI00180434 GRAMD1A	KRPLSWR SQEPSPVQSR STPSSSPSLR	1 5 686 1 5 393	11 19 50 0.961 1.13 1.161 1.311 0.837 0.961 Y 41 22 72 1.347 0.937 1.232 0.875 0.893 0.747 Y 14 12 16 1.085 1.046 1.025 1.038 0.497 0.885 Y	1.024 0.919 0.884 0.873 0.488 0.458 Y 1.216 1.399 1.357 1.305 0.885 0.93 Y 0.85 0.917 0.986 0.844 0.492 0.841 Y 0.33 0.913 0.855 0.832 0.824 0.598 Y 0.719 1.149 0.82 0.87 0.321 0.411 N 0.986 NA 0.707 NA 0.531 NA N	0.927 0.592 1.184 1.122 0.629 0.512 Y 0.677 0.752 0.699 1.145 0.573 0.708 Y NA 0.709 NA 0.789 NA 0.463 Y	1.139 0.888 1.504 1.116 1.041 0.786 Y 1.277 1.887 1.8 1.901 1.002 1.306 Y 0.849 0.336 0.886 1.059 0.823 0.88 Y 1.105 1.303 1.04 1.108 0.79 0.895 Y 1.305 NA 1.472 NA 1.768 NA
Second State	IP100292228 GSK3A IP100292228 GSK3A IP100292228 GSK3A IP100292228 GSK3A	GSKIA ARTSSFAFPGGGGGGGGGGGGGSGGPGGSASGPGGTGGGK GSKIA ASVGAMGGGVGASSSGGGPGGSGGGGGGGGGGGGGGFFPPPGVK GSKIA GEPRVSYICSR	1 5 21 21 UNIPROT 2 14(15)22(27)34(35 64(65)72(77)84(85	144 24 77 1.043 0.023 0.091 0.85 0.819 0.529 Y 34 6 9 NA 0.775 NA 0.745 NA 0.257 N 80 21 883 1.14 0.051 1.113 0.986 0.985 0.812 Y	1.717 0.982 1.722 0.92 0.704 0.552 Y 1.252 1.143 1.031 2.008 0.725 1.363 Y NA	1.097 0.745 1.084 0.884 0.715 0.718 Y 0.792 NA 1.038 NA 0.419 NA N 1.023 0.882 1.089 1.01 0.9 0.739 Y	1.007 1.324 1.186 1.185 0.289 0.77 Y 1.323 0.845 1.247 1.491 0.711 1.258 Y 1.003 1.523 0.090 0.615 1.024 N NA N
State Stat			1 1 2 2.283 20821 21 UNIPROT	20 43 1.884 0.759 2.16 1.081 1.028 0.518 Y 72 5 5 2.092 NA 1.233 NA 1.293 NA NA 0.001 1.028 0.518 Y 80 21 854 1.14 0.951 1.113 0.998 0.985 0.812 Y	0.742 0.806 0.721 0.748 0.389 0.277 Y 1.35 0.861 0.819 0.839 0.517 0.531 Y NA	0.816 1.13 1.174 1.104 0.626 0.7 Y 3.622 NA 3.689 NA 1.845 NA N	0.855 0.894 0.878 1.286 0.81 0.894 Y 1.344 0.831 0.842 1.091 0.82 N NA 2.284 NA 1.096 NA 0.647 N NA N
State Stat	IP100216190 GSK3B IP100216190 GSK3B IP100029769 HCK	GSKGB GEPRVSYICSR GSKGB TTSFAESKØY/GQPSAFGSMK HCK VIEDNEYTAR		29 20 156 1.023 0.867 1.069 0.972 0.912 0.731 Y 58 24 173 1.068 1.041 1.038 0.885 0.97 0.679 Y 46 24 111 0.358 0.839 0.589 0.285 0.131 0.055 Y	0886 0.782 0.845 0.829 0.783 0.795 Y 1.086 0.863 1.006 0.985 0.79 0.737 Y 0.221 0.946 0.807 0.886 0.516 0.599 Y 1.16 1.333 1.037 0.732 0.747 0.886 Y 0.581 0.28 0.165 0.088 0.081 0.044 Y 0.801 0.802 0.32 0.144 0.086 0.089 Y	1.022 0.768 1.076 1.049 0.844 0.719 Y 0.85 0.744 0.912 0.94 0.841 0.503 Y 0.311 0.072 0.079 0.054 0.054 0.021 Y	0.992 1.446 0.374 0.341 0.882 0.795 Y 1.19 0.606 1.309 1.038 0.305 0.784 Y 1.088 1.087 0.340 0.346 0.816 0.734 Y 0.366 0.886 0.87 0.770 0.708 0.578 Y 1.002 1.082 0.395 0.754 0.818 0.897 0.770 1.774 0.773 1.134 1.045 1.089 0.784 Y
State Stat	IP100414/44 HIPK1 IP10025054 HNRPU IP100398625 HRNR IP100414676 HSPCB	AKSPOPP/VEEDEHFDDTVVCLDTYNCDLHFK QGSGSQG9PSRGHHGSQLGHSSSHOOHGSGSGR IEDWGSDEEDDSGK	1 3 5 8 10 16 21 22 23 1707 1709 1712 1714 1720 1725 1726 1727 1 6 254 194990T	36 5 5 NA NA NA NA NA NA NA NA NA S 32 1 1 NA NA NA NA NA NA NA NA NA S 55 14 34 1.48 NA 0.653 NA 0.611 NA Y	NA NA NA NA NA NA NA N	NA 0.718 NA 0.933 NA 0.335 N NA NA NA NA NA NA NA NA 1.108 1.05 1.164 1.445 0.893 0.951 Y	0.612 0.616 0.616 1.686 0.044 0.636 Y 1.511 1.214 1.427 1.014 1.026 0.061 Y 0.062 NA 1.535 NA 1.535 NA
State Stat	IP100465017 DKFZP781A03 IP100052361 XP_070678 IP100016032 SHIP2	0095 PTTGVILPSGNTLRVK GPGHYPASULSPLYPFSSGR DASDGEDEKPPLPPR	2 263 364	33 2 3 NA	0.674 NA 0.782 NA 0.559 NA N NA N	NA N	NA N
	IP100016032 SHIP2 IP100016032 SHIP2 IP100016032 SHIP2 IP100016032 SHIP2	ERL TEVRISIENDEHMAN GLPSDYGR LDMDIGEILNYSRK NSFNNSAYYLEGYPHOLLPPEPPSPAR		24 477 0.815 0.37 0.33 0.231 0.118 0.002 Y 60 1 1 NA	0.123 0.121 0.155 0.083 0.083 0.083 0.089 Y 0.089 0.451 0.29 0.257 0.113 0.111 Y NA	0.188 0.145 0.207 0.212 0.121 0.111 Y NA NA NA NA NA NA NA NA NA 0.193 0.093 0.067 0.108 0.046 0.138 N	1.119 U.091 U.45 U.45 U.45 U.45 U.45 U.45 U.45 U.45
See	IP100016932 SHIP2 IP100016932 SHIP2 IP100016932 SHIP2	NSPNIPAYYYLEGYPHOLLPPEPPSPAR QRDSQEDWTTFTHDR TLSEUDYAPAGPAR	2 889 9868987 986, 987 PhosphoELM,PhosphoELM 1 4 352	45 9 13 1.119 0.505 0.715 0.334 0.428 0.101 N 87 24 102 0.835 0.324 0.256 0.125 0.109 0.096 Y	NA NA NA NA NA NA NA NA NA N 1204 0.887 0.412 0 0.289 0.22 N NA NA NA NA NA N 0.8 NA 0.448 NA 0.266 NA NA N 0.09 0.092 0.092 NA NA NA NA N 0.662 0.34 0.206 0.098 0.097 0.094 N	NA NA NA NA NA NA N NA NA NA NA NA NA N 0.116 0.033 0.09 0.027 0.046 0.026 Y	0.963 0.961 0.779 0.498 0.351 0.193 Y 0.873 0.496 0.588 0.277 0.248 0.077 Y
See	IP100183850 HYPOTH. PRI IP100183850 HYPOTH. PRI IP100183850 HYPOTH. PRI IP100031016 JAK2	ROT SHNSAL YSQVQK ROT VKEEGYELPYNPATDDYAVPPPR JAK2 EVGDYGOLHETEVLIK	1 5 570 570 PhosphoELM	92 23 110 0,221 0,719 0,726 0,009 0,413 0,277 N 60 10 15 NA	0.045 0.117 0.085 0.046 0.037 0.019 Y 1.544 NA 0.164 NA 0.102 NA NA 0.162 NA 0.102 NA NA 0.164 NA 0.102 NA NA 0.164 NA 0.102 NA NA 0.161 Y 0.151 Y 0.152 0.12 0.1 0.247 0.056 0 N 0.02 NA 0.123 NA 0.06 NA NA 0.174 NA 0.374 0.37 0.374 0.37 0.374 0.37 0.374 0.37 0.375 0.171 Y 1.204 0.397 0.173 1.02 0.534 0.885 Y	0.358 0.365 0.362 0.434 0.321 0.263 Y NA NA NA NA NA NA NA N 0.676 0.815 0.751 0.829 0.722 0.434 Y	1.043 2.715 0.096 0.653 1.231 0.099 Y 0.519 0.251 0.253 0.260 0.50 0.333 Y 1.049 1.139 0.778 0.857 1.833 0.704 Y 0.91 0.71 0.798 1.069 0.431 0.858 N 0.792 2.593 0.64 1.03 0.598 0.655 Y 1.333 0.794 0.792 0.792 0.794 0.795 0.794 0.795 0.794 0.795 0.794 0.795 0.794 0.795 0.794 0.795 0.794 0.795 0.795 0.794 0.795 0
Part	IP100431263 KIAA0195 IP100641384 KIAA0310 IP100465142 KIAA0528	VEPPHSSHEDLTDGLSTR FTGSFDDDPDHR AMTVEKASIVGDGFR	1 6[7]12 444[445]450 1 4 1149 1149 UNIPROT 1 8 890	58 23 40 1.357 0.999 1.118 0.77 0.792 0.703 Y 31 14 39 1.136 0.8 1.206 0.533 0.796 0.579 N 19 12 14 1.403 0.969 1.202 1.076 0.965 0.7 Y	0.532 0.785 0.854 0.678 0.43 0.499 Y 0.579 1.193 1.053 1.061 0.59 0.942 Y 0.998 0.804 1 0.8 0.725 0.437 N 0.884 1.015 0.846 0.839 0.756 0.757 Y 0.667 0.687 0.675 0.516 0.579 0.987 Y 0.668 NA 1.104 NA 0.998 NA 1.104 NA 0.998 NA NA 1.104 NA 0.998 NA NA 1.104 NA 0.998 NA NA 0.998 NA 1.104 NA 0.998 NA NA 0.998 NA NA 1.104 NA 0.998 NA NA 0.998 NA 1.104 NA 0.998 NA NA 0.998 NA 1.104 NA 0.998 N	0.912 0.961 1.036 0.862 0.833 0.721 Y 0.57 0.605 0.824 0.903 0.502 0.702 Y	1509 1.901 1.57 1.514 0.622 1.028 Y 0.803 0.791 0.815 0.868 0.813 0.706 Y 1.214 1.123 3.000 0.989 0.986 0.785 Y 1.017 0.897 0.984 1.123 0.827 0.441 Y NA NA <td< td=""></td<>
Seel Properties and seel seel seel seel seel seel seel see	IP100465142 KIAA0528	ATSYDYSSFADR EIPPHEDPINPNTHSSGPSTPLK QSSSSDTDLSLTPK QSSSSDTDLSLTPK QSSSSDTDLSLTPK		41 23 42 0.9 1.176 0.933 1.294 0.726 1.188 Y 44 10 12 0.738 NA 0.37 NA 0.541 NA N 37 20 33 0.716 1.359 0.768 1.715 1.019 0.485 Y	0.742 1.033 0.652 0.706 0.515 0.579 Y 1.162 1.257 0.989 0.735 0.607 0.707 Y 0.765 NA 0.365 NA 0.764 NA N 1.057 NA 1.07 NA 0.465 NA N 1.148 0.975 1.862 0.974 1.051 0.391 Y 1.143 1.227 1.435 1.829 0.781 0.85 N	0.852 0.899 1.078 1.399 0.804 0.71 Y 0.854 1.606 0.6 1.266 0.094 0.705 N 1.656 0.947 1.069 1.421 1.022 1.079 Y	1.069 1.199 0.025 0.791 0.627 0.691 Y 1.046 0.898 1.099 1.197 0.354 0.807 Y NA
State Stat	IP100465142 KIAA0528 IP100465142 KIAA0528 IP100465142 KIAA0528	SQSESSDEVTELDLSHQK SQSESSDEVTELDLSHQK SQSESSDEVTELDLSHQK SQSESSDEVTELDLSHQK	1 3 659 659 659 LINIPROT 2 3 596 659 6619652 659 LINIPROT 1 395 659661 659 LINIPROT 659 LINIPROT 659 LINIPROT	50 15 19 NA 0.302 NA 0.679 NA 0.54 N 50 7 11 NA	0.478 1.065 0.44 0.918 0.335 0.877 Y 1.607 NA 1.474 NA 1.397 NA N 0.585 0.024 0.652 0.645 0.417 0.207 Y 0.765 NA 0.772 NA 0.37 NA 1.47 0.787 1.652 0.727 1.553 0.387 Y 1.222 NA 1.118 NA 0.82 NA	0.8 0.716 1.286 1.189 0.611 0.934 Y 1.027 NA 1.339 NA 0.766 NA N 1.019 1.286 1.036 1.878 1.181 1.149 Y	NA N
Part	IP100657720 KIAA0999	QSK IADFGFSNLFTPGQLLKTWCGSPPYAAPELFEGK	1 18(22 215(219) 1 4(5 772)773	21 12 15 0.835 NA 0.92 NA 0.634 NA Y 77 19 34 0.754 0.823 1.048 0.933 0.235 0.11 N 47 22 73 0.995 0.704 0.878 0.444 0.464 0.157 Y	0894 0.649 0.464 0.599 0.415 0.481 Y 1.228 NA 0.894 NA 0.678 NA 0.	0.628 0.375 0.681 0.679 0.356 0.259 Y 0.779 0.952 0.784 0.488 0.237 0.138 Y 0.779 0.883 0.597 0.38 0.343 0.18 Y	NA 1.076 NA 1.076 NA 0.656 NA Y 0.704 2.314 0.747 1.569 0.734 0.943 N 1.176 2.471 1.54 1.74 0.757 1.042 Y NA N
Part	IP100857720 KIAA0999 IP100022296 KIT IP100394952 LCK	OSK RASDOGANIQLHAGGLIK KIT GISESTNHYSNLANCSPNR LCK LIEDNEYTAR	1 3 545 1 10 936 936 PhosphoELM 1 7 394 394 UNIFICOT	31 6 10 NA	NA N	0.804 0.767 0.457 0.575 0.348 0.348 Y 0.373 0.243 0.138 0.208 0.109 0.053 Y 0.034 0.037 0.035 0.053 0.02 0.028 Y	NA.
Part	IPI00291702 LIMK1 IPI00022872 LIMK2 IPI00022872 LIMK2 IPI00022872 LIMK2	LIMK1 SCSIDRSPGAGSLGSPASGR LIMK2 SNSISKPGPSSPK LIMK2 SPGPSSPKEPLLFSR	1 3 226 295 UNIFROT 1 3 289 220 UNIFROT 1 15 223(297 223 UNIFROT	83 24 54 1.596 0.992 1.898 1.291 1.193 0.724 Y 41 18 34 0.999 0.724 1.571 0.988 1.077 0.75 Y 28 23 41 0.91 0.745 1.222 0.918 0.757 0.504 Y	1.002 0.888 1.055 1.014 0.804 0.457 Y 1.042 0.017 1.255 1.144 0.737 0.335 Y NA 1.12 NA 1.024 NA 0.868 Y 1.324 1.057 1.055 1.036 0.574 0.442 Y 0.72 0.852 0.786 0.929 0.851 0.757 Y 1.003 0.396 1.112 0.534 0.474 0.396 Y 0.851 0.757 Y 1.003 0.396 1.112 0.534 0.474 0.396 Y 1.003 0.803 0.481 0	1.586 1.617 1.388 1.429 0.599 0.476 Y 1.612 0.999 1.123 1.113 0.59 0.47 Y 0.8 0.861 0.869 0.79 0.527 0.339 Y	1.48 1.888 1.113 1.175 0.296 0.859 Y 1.081 1.085 1.168 1.39 0.025 0.22 Y 1.233 1.145 1.025 1.255 1.152 0.788 Y 1.185 NA 1.029 NA 1.048 NA Y 1.228 2.001 0.872 0.886 0.894 0.895 Y 0.806 1.423 0.899 1.785 0.561 0.308 Y
Part	IP100478300 LSM14A IP100298625 LYN IP100298625 LYN	ADUNVISUAL SENSOR SPESTRE PRASSICK LYN ACISPKPOKPUNKDAWEIPR LYN ACERPTOYLOSVLDDFYTATEGGYGGOP	1 1 216 216 LINIPROT	01 0 11 0.541 F64 0.531 NN 0.406 F64 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0.372 0.097 0.913 0.744 0.614 0.338 Y 1.645 0.942 0.854 0.877 0.671 0.81 Y 0.474 0.328 0.103 Y 0.843 NA 0.507 NA 0.141 NA V 0.474 0.851 0.	0.675 NA 0.899 NA 0.731 NA Y NA 0.126 NA 0.2 NA 0.091 N 0.765 NA 0.053 NA 0.124 NA N	NA N
Mart	IP100298625 LYN IP100215778 LYN IP100298625 LYN	LYN DSLSDDGVDLK LYN GKDSLSDDGVDLKTQPVPESQLLPGQR LYN SLDNGGY19PR	1 4 13 13 LNIPROT 1 6 12 12 LNIPROT 1 7 193 133 PhosphoELM	39 24 180 0.958 0.358 0.759 0.817 0.225 0.124 Y 33 12 21 2.235 1.457 2.549 0.586 0 0.167 N 66 19 38 1.138 1.051 1.288 0.647 0.419 0.138 Y	0.884 0.597 0.559 0.27 0.135 0.106 Y 0.888 0.845 0.632 0.295 0.143 0.107 Y 0.889 0.558 0.328 0.403 0.180 0.179 N 1.3 1.25 0.67 1.211 0.145 0.408 Y 0.881 0.637 0.607 0.191 0.11 0.159 Y 0.844 0.883 0.534 0.408 0.17 0.154 Y	0.526 0.293 0.151 0.085 0.076 0.056 Y 0.738 NA 0.057 NA 0.008 NA N 0.392 NA 0.188 NA 0.18 NA N	0.93 1.227 0.023 0.858 0.774 0.63 Y 1.518 1.002 1.873 1.32 1.138 1.062 Y 1.857 0.916 1.258 0.944 1.585 0.8 Y 2.800 1.228 4.552 0.759 0.738 0.877 N 1.002 1.334 1.128 0.863 1.048 0.791 Y 1.367 1.229 1.091 0.86 0.813 0.77 Y
Mart	IP100298625 LYN	LYN TIYVRDPTSMK LYN VIEDMEYTAR MAPSK1 ATSPEAGGOGGALK MAPSK1 ATSPEAGGOGGALK MAPSK2 GREENEGALVEROUP		30 23 46 0.99 0.905 0.982 0.534 0.423 0.112 Y 46 24 231 0.907 0.769 0.869 0.248 0.135 0.044 Y 58 21 40 1.019 0.514 0.886 0.222 0.23 0.191 Y	0801 0308 0203 0.17 0.099 0.084 Y 1.16 0.712 0.055 0216 0.161 0.066 Y 1.000 030 0304 0.176 0.05 0.076 Y 1.00 0.050 030 0304 0.176 0.05 0.076 Y 1.06 0.641 0.321 0.296 0.142 0.152 Y 0.876 1.237 0.762 0.986 0.355 0.4 Y 0.762 0.000		0.876 1.188 1.063 0.84 0.84 0.958 Y 1.372 1.018 1.263 0.876 0.965 0.006 Y 1.263 1.089 1.094 0.094 0.856 0.205 0.617 Y 1.097 1.089 0.828 1.024 1.020 0.851 Y 0.855 2.132 1.03 0.718 0.858 0.737 Y 0.472 0.836 0.828 1.377 0.758 1.037 Y 0.472 0.836 0.828 1.377 0.758 1.037 Y 0.472 0.836 0.828 1.087 0.858 0.828 1.098 0.858 0
Properties Pro	IPI00012318 MAP3K1 IPI00012318 MAP3K1 IPI00012318 MAP3K1	MAPIKI LEASSEDISER MAPIKI RAPSPOGESPPSPEETNR MAPIKI SEVAVLSPEKAENDOTYKDOVNHNQK	1 4 1057 1 4 426 7 1291	23 43 1.063 0.319 0.644 0.341 0.2 0.088 Y 42 18 40 1.198 0.68 0.87 0.601 0.413 0.333 Y 33 1 1 NA NA NA NA NA NA NA NA	C206 0.428 0.32 0.196 0.073 0.054 Y 1.169 1.011 1.062 1.031 0.001 0.378 Y 0.715 0.797 0.399 0.837 0.245 0.217 Y 1.327 NA 0.229 NA 0.562 NA	1.063 1.040 1.03 0.762 0.827 0.316 Y NA 0.588 NA 0.863 NA 0.433 N 1.022 NA 0.747 NA 0.762 NA N	0.98 1.862 1.044 1.144 0.827 0.923 Y 0.839 0.749 0.828 0.828 0.544 0.375 Y 1.069 2.348 0.745 1.127 0.887 0.788 Y 0.791 0.258 0.972 0.989 0.784 0.744 Y NA
Properties Pro	IPI00513803 MAP3K2 IPI00513803 MAP3K2 IPI00513803 MAP3K2 IPI00513803 MAP3K2	MAPSK2 AGSYPONHOEFSDYDNIPFEK MAPSK2 RGSDIONPTLTVMDISPPSR MAPSK2 RGSDIONPTLTVMDISPPSR MAPSK2 RGSDIONPTLTVMDISPPSR	1 4 240 1 3 4 163 164 164 LINIPROT 1 3 330 153	51 19 24 1.379 0.778 1.3 0.503 0.499 0.213 N 64 24 111 0.908 1.138 1.003 0.798 0.635 0.466 Y 78 20 34 1.675 0.863 1.933 0.635 1.208 0.374 N 78 27 78 1.2 0.872 1.812 0.809 0.78 0.377 Y	0882 0.765 0.52 0.29 0.081 0.100 N 2.602 1.551 1.233 1.481 1.046 0.605 N 10.776 0.771 0.596 0.603 0.306 0.281 Y 1.039 0.788 0.984 0.688 0.683 0.392 Y 0.735 0.88 0.429 0.413 0.351 0.278 N 1.204 0.892 1.278 1.113 0.686 0.343 Y 0.731 0.884 0.971 0.772 0.478 0.772 V 0.888 1.277 0.992 1.777 0.992 1.777 0.993 1.777 0.973 0.777 V 0.777	1.288 1.246 1.415 0.891 1.06 0.255 Y 0.939 0.838 0.992 0.861 0.734 0.419 Y 0.719 0.583 0.882 1.026 0.415 0.388 Y 0.745 1.01 1.103 1.275 0.277 0.825 Y	1.129 NA 0.256 NA 1.065 NA 1.065 NA 1.236 0.547 1.138 0.584 0.629 0.571 N 1.236 1.44 1.136 0.852 0.659 0.671 Y 0.291 0.299 1.282 1.422 0.839 0.253 Y 0.963 1.855 0.257 1.5 0.291 0.255 N 0.231 NA 0.777 NA 0.72 NA N 1.295 1.597 1.598 1.190 1.016 0.733 Y 0.887 1.490 1.139 2.794 0.779 1.204 Y
Mart	IPI00181703 MAP3K3 IPI00181703 MAP3K3 IPI00386260 MAP3K4	MAPIKS AGSPIONR MAPIKS LISADSENALSVQER MAPIK SLISADSENALSVQER	1 3 281 1 3/6 368(371 368 PhosphoELM 1 3 1252	14 18 27 0.831 1.995 1.122 1.474 0.599 0.346 Y 50 19 44 1.038 1.045 1.072 0.802 0.484 0.130 Y 40 24 177 1.316 1.191 1.324 0.954 0.508 0.235 Y	0335 0.81 0.727 0.905 0.388 0.298 Y 0.921 0.588 0.982 0.807 0.589 0.328 Y 0.921 0.588 0.982 0.807 0.989 0.438 Y 0.921 0.988 0.982 0.807 0.989 0.489 0.	0.52 0.74 1.125 0.82 0.71 0.338 Y 1.34 0.863 1.46 1.198 1.035 0.408 Y 1.003 0.639 1.223 0.844 0.384 0.301 Y	NA. 434 NA 0.863 NA 0.665 N 1.052 0.58 1.611 0.719 0.781 0.788 V 1.233 3.468 1.154 1.134 1.309 0.774 N 1.574 1.108 1.413 1.407 0.713 0.557 Y 1.239 2.118 1.539 1.237 0.731 0.594 Y 1.285 1.471 1.462 1.434 0.722 0.0557 Y
	IP100386260 MAP3K4	MAPSK4 NLSDIGWPVFEIPSPRPSK MAPSK4 OPDISFFOIGSR MAPSK4 OPSRTDCPADR	1 14/18 431/435 1 6/11 481/486 1 2/3/5 213/214/216		0.537 0.46 0.274 0.081 0.159 0.183 Y 0.919 0.882 0.63 0.146 0.31 0.081 Y 0.302 NA 0.597 NA 0.321 NA N NA N	0.693 0.676 0.469 0.416 0.439 0.216 Y 0.616 NA 0.424 NA 0.439 NA N 0.471 0.386 0.219 0.195 0.048 0.054 Y	1.533 1.734 2.414 1.378 1.904 1.208 Y 1.207 NA 1.225 NA 0.548 NA N NA NA NI 1.315 NA 1.023 NA 0.617 NA N 1.625 1.871 1.348 1.108 1.11 0.682 Y 0.972 0.777 1.086 1.179 0.607 0.647 Y
## PRODUCTION 1	IP10023479 MAPK1 IP100003479 MAPK1 IP100003479 MAPK1 IP100003479 MAPK1	EH2 HYLDQLNHLGILGSPEGEDLNCINLK EH2 VADPOHDHTGFLTEYVATR EH2 VADPOHDHTGFLTEYVATR	1 15(17 245(247 1 15(15 184)186 184, 186 UNIPROT, UNIPROT	59 2 2 NA 1.348 NA 2.373 NA 0.434 N 777 24 229 1.153 1.012 1.079 1.027 0.797 0.691 Y 36 23 64 1.433 1.273 1.154 1.114 0.224 0.942 Y	NA 0.023 NA 0.037 NA 0.265 N NA N	NA N	1,000 3,722 U.55 U.550 U.550 U.574 U.742 N 2,546 NA A-22 NA U NA
## PRODUCTION 1	IP100019473 MAPK11 IP100002857 MAPK14 IP100002857 MAPK14	p38b AADEBITGYVATR p38a HTDDEMTGYVATR p38a HTDDEMTGYVATR	1 9 190 1 7/9 180/182 180, 182 UNIPROT, UNIPROT 2 780 1806/182 180 182 UNIPROT UNIPROT	61 15 32 1.114 1.225 1.447 1.033 0.938 1.107 Y 1011 24 1195 1.267 1.195 1.391 1.113 0.577 0.45 Y 48 23 178 1.268 1.079 1.085 1.278 0.457 0.318 Y	0.872 0.721 0.852 0.84 0.529 0.346 Y 3.583 1.826 2.879 0.727 2.907 0.82 N 0.933 0.892 1.006 0.302 0.351 0.268 Y 1.294 1.888 1.218 1.033 0.352 0.322 Y 0.817 1.133 0.869 1.123 0.277 0.272 Y 1.195 1.219 1.105 0.105 0.281 0.269 Y	0.808 0.821 0.697 0.731 0.228 0.259 Y 1.178 1.073 1.008 0.711 0.312 0.26 Y 2.077 1.23 1.385 0.677 0.433 0.229 Y	NA O.825 NA 0.85 NA N 1.109 2.161 1.249 1.577 0.622 0.439 Y 0.909 1.076 1.107 1.431 0.537 0.6 Y 1.351 3.114 1.178 1.430 0.437 0.439 Y 0.852 0.862 1.195 1.299 0.527 0.412 Y
## PRODUCTION 1	IP100002857 MAPK14 IP100002857 MAPK14 IP100003431 MAPK6	pSBa GENKTIVEVPER pSBa SCERPTFYR EMS GHISEGLUTK	1 6 16	24 19 28 0.935 0.941 0.976 0.905 0.896 0.589 Y 18 22 75 1.447 1.334 2.901 3.676 1.039 0.816 Y 22 15 39 1.891 0.998 1.521 1.323 1.07 0.611 Y	0828 0.991 0.796 0.843 0.552 1.001 Y 0.921 1.203 1.021 0.703 0.516 0.424 Y 0.512 1.001 0.50 0.843 0.550 1.001 Y 1.255 2.201 2.887 5.084 0.095 0.43 Y 1.224 NA 1.168 NA 0.848 NA Y 1.457 1.35 1.366 1.344 0.85 1.109 Y	1.441 0.772 1.533 0.979 0.615 0.383 Y 0.616 0.994 0.794 0.992 0.305 0.506 Y 1.46 1.214 1.524 1.949 1.147 1.102 Y	0.8 0.902 0.723 0.59 1.004 0.811 N 1.002 NA 0.923 NA 0.772 NA Y 2.554 2.916 0.053 2.371 1.266 0.804 Y 1.084 1.242 0.765 1.076 1.042 0.855 Y 2.262 2.776 2.085 2.405 1.835 Y 1.876 NA 1.875 NA 0.837 NA 0.377
## PRODUCTION 1	IP100003145 MAPK8 IP100024672 MAPK8 IP100024672 MAPK8	JNK1 GOPSPLAGUGG JNK1 TAGTSPMMTPYVVTR JNK1 TAGTSPMMTPYVVTR	1 4 377 371 MIRROT 1 153 185 183,185 LINIPROT 1 2 9&11 1838.185 LINIPROT LI	46 16 30 1.179 0.383 1.102 0.738 0.763 0.595 Y 101 14 45 0.902 1.415 0.944 0.803 0.894 0.547 Y 39 12 18 0.831 0.944 0.837 0.91 0.427 1.288 N	0.727 0.526 0.359 0.502 0.404 0.369 Y 1.062 1.559 0.914 0.631 0.679 1.635 V 1.651 0.679 1.635 N 1.657 0.425 N 1.657 0.425 N 1.657 0.425 0.42 0.09 1.833 N NA N	1.013 0.789 1.069 0.679 0.816 0.28 Y 0.631 0.734 0.945 0.755 0.588 0.457 Y 1.923 0.596 1.51 0.616 1.487 0.217 Y	NA 0.75 NA 0.372 NA 0.428 N NA N
## PRODUCTION 1		MARK1 LDTFCGSPPYAPELFOGK MARK2 FSDQAGPAPTSNSYSK MARK2 GRNSATSADEQPHIGNYR	1 3(1) 103(105 103, 105 UNERFOLT, UNERFOLT 1 3(7 215)219 UNERFOLT 1 15(16 422)423 40 UNERFOLT 1 44607 4042943 40 UNERFOLT 1	57 11 58 0.675 0.793 1.073 0.894 0.632 0.581 Y 47 19 61 2.019 1.021 1.175 0.962 0.91 0.42 Y 41 13 17 2.133 0.733 0.812 1.88 0.43 0.893 N	U-91 U-91 2.55 U-93 U-94 U-927 U-91 V U-91 U-91 U-94 U-94 U-94 U-94 U-94 U-94 U-94 U-94	0.914 1.584 1.84 1.417 0.739 0.994 Y 0.938 1.037 1.118 1.291 0.686 0.536 Y	1.177 1.973 0.915 0.985 0.895 0.707 Y 1.13 0.787 1.692 0.986 1.318 0.329 Y 1.465 1.118 1.334 1.513 0.616 0.733 N 1.285 1.695 1.345 0.863 1.047 0.929 Y
PRODUCTION MARCH	IP100555838 MARK2 IP100555838 MARK2 IP100555838 MARK2	MARKZ UDFGFSNEFFGNNLDTFGGSPPYAAPELFOGK MARKZ LDTFGGSPPYAAPELFOGK MARKZ SRNSPLLER	1 7[11 127[201 1 7 212 212 LINIPROT 1 1[4 463[486 486 LINIPROT	57 14 18 3.075 1.956 2.223 1.717 1.375 1.137 N 57 11 58 0.875 0.793 1.073 0.894 0.832 0.581 Y 25 23 81 1.147 1.134 1.153 1.131 0.283 0.65 Y	1.905 0.747 1.862 0.222 1.235 0.817 N 1.503 NA 0.985 NA 1.231 NA N 1.513 0.755 1.221 0.894 0.927 0.519 Y 0.915 0.764 1.089 1.057 0.545 0.555 Y 1.101 0.944 0.904 0.807 0.545 0.576 Y 0.903 1.032 0.836 1.086 0.511 0.596 Y	0.499 NA 0.604 NA 0.31 NA N 0.914 1.564 1.84 1.417 0.739 0.994 Y 0.91 0.861 1.257 1.239 0.762 0.606 Y	4211 10.371 1.34 1.525 1.96 1.523 N 1.391 1.638 1.23 1.714 0.39 1.346 Y 1.177 1.973 0.915 0.365 0.895 0.707 Y 1.13 0.787 1.852 0.598 1.318 0.329 Y 1.088 1.539 1.191 1.451 0.853 0.991 Y 1.085 1.874 1.307 1.227 0.888 1.059 Y
PRODUCTION MARCH	IPIUUSSSB38 MARKZ	MARK2 VPASPLPGLER MARK2 VPASPSAHNISSSGGAPDR MARK3 IADFGFSNEFTVGGKLDTFCGSPPYAAPELFQGK	. 14 546 558 LNEPROT 5 558 LNEPROT 5 5 1 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	24 19 31 1.04 0.952 0.854 1.222 0.856 Y 66 9 11 0.991 1.396 1.17 0.67 0.773 0.526 N 57 11 60 0.579 0.793 1.073 0.894 0.631 0.881 Y	0.679 0.733 0.702 0.000 0.352 0.513 Y 0.004 0.039 0.787 0.5 0.722 0.845 Y 0.006 0.771 0.08 0.052 0.389 0.353 N 1.753 NA 0.007 NA 0.706 NA NA 1.513 0.738 1.221 0.004 0.027 0.519 Y 0.015 0.075 0.015 0.015 0.722 0.845 Y	0.76 0.587 0.887 1.09 0.629 0.641 Y 1.2 NA 1.044 NA 0.912 NA N 0.914 1.53 1.84 1.599 0.739 1.126 Y	NA 0,759 NA 1,269 NA 1,057 NA 0,733 N 0,43 1,339 0,845 4,381 0,346 2,133 N NA N
## PRODUCTION 100 10	P100183118 MARKS P100064797 MARK4 P100064797 MARK4 P100100879 MARK4	MARK3 VRPSSDLNNSTGQSPHHK MARK4 LDTFCGSPPYAAPELPQGK MARK4 RSPTSTGEAELKEER I FSTSRKGCAPROPROPROP	1 10 419 1 3 214 214 UNIPROT	32 3 3 1.595 NA 1.004 NA 1.213 NA N 57 11 55 0.675 0.793 1.073 0.694 0.622 0.581 V 59 20 43 NA 0.903 NA 0.694 NA 0.61 N	NA N	NA 0.978 NA 1.298 NA 1.024 N 0.914 1.584 1.84 1.417 0.739 0.994 Y 0.806 0.638 1.145 0.879 0.757 0.437 Y NA NA NA NA NA NA NA	NA N
## PRODUCTION 100 10	IP100100630 MLLT1 IP100100630 MLLT1 IP100294701 MNAT1	RPATADSPKPSAK RSPESCSKIPEK AASPQDLAGGYTSSLACHR	1 7 292 222 PhosphoELM 1 2 475 475 UNIPROT 1 3 279	20 17 40 1.069 1.084 0.851 0.939 0.81 0.747 Y 15 17 57 1.216 1.05 0.714 0.849 0.853 0.849 Y 24 24 52 1.112 0.88 1.373 0.869 1.045 0.484 Y	0.733 1.076 0.567 0.765 0.521 0.533 Y 1.004 0.991 0.947 1.134 0.799 0.732 Y 0.985 0.981 0.988 0.752 0.373 0.857 Y 1.101 1.075 0.849 0.085 0.744 0.721 Y 0.636 1.028 0.599 0.644 0.372 0.555 Y 1.620 0.77 0.743 0.792 0.853 0.857 Y	1.082 0.702 1.024 0.519 0.908 0.484 Y 0.97 0.928 1.138 0.53 0.876 0.491 Y 0.837 0.782 1.231 0.848 0.78 0.756 Y	1.144 1.321 0.897 0.85 0.827 0.807 Y NA
#PR000016909 NEKG \$51VTEAPIAVVTSR 1 3 333 333 UNIPROT 37 6 10 1.223 1.887 1.036 0 1.197 0.463 N NA N	IP100308531 NCK2	DASPTPSTDAEYPANGSGADR DASPTPSTDAEYPANGSGADR	1 10 51 1 39 12 90 02/99 2 39 12 90 02/99	80 1 1 NA 2.358 NA 0.768 NA 0 N 67 3 6 NA NA NA NA NA NA NA	1.248 0.658 0.867 0.548 0.714 0.807 Y 0.808 NA 0.789 NA 0.804 NA	1.343 0.765 1.108 0.719 0.783 0.636 Y NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA	NA N
#PR000016909 NEKG \$51VTEAPIAVVTSR 1 3 333 333 UNIPROT 37 6 10 1.223 1.887 1.036 0 1.197 0.463 N NA N	IP100321331 NEK2 IP100301609 NEK9 IP100301609 NEK9 IP100301609 NEK9	NEKO ELENAEFIRMOSPYLSAERSESEKOTLPYEELQGLK NEKO GTPLTPPACACSSLQVEVER NEKO GTQTAKEEMEMDPKPDLDSDSWCLLGTDSCRPSL	1 18 832 1 5 886	62 4 4 0.079 0.763 0.223 0.554 0.54 0.401 Y 34 1 1 NA 0.278 NA 0.456 NA 0.349 N 42 7 9 0.000 0.296 0.5 0.797 0.445 0.998 N	NA 1.376 NA 0.779 NA 0.227 N NA N	NA N	NA N
**************************************	IP100301609 NEK9 IP100301609 NEK9 IP100301609 NEK9	NEK9 HCDSINSDFGSESGGCGDSSPGPSASGGPR NEK9 SSTVTEAPIAVVTSR NEK9 VASEAPLEHKPGVEASSPR	1 3 333 333 LINIPROT 1 16(17 868)869 868,869 LINIPROT, LINIPROT	69 9 9 0.452 38.92 0.451 23.725 2.884 8.985 N 37 6 10 1.223 1.887 1.336 0 1.197 0.463 N 35 24 123 1.163 1.089 1.038 0.03 0.023 0.762 Y	3.891 0.338 1.555 0.633 0 0 N NA 1.894 NA 0.573 NA 0 N NA 0.77 NA 0.71 NA 0.01 NA 0.074 N 0.288 NA 0.7 NA 0.74	NA N	NA N
Properties Pro		NLK HMIDEWITGYPK SPNGSLKWAWDELSR TRKA DYSTDYYR PAKA DKRPLSGPDVGTPGPAGLASGAK			0.839 0.831 0.787 0.731 0.386 0.336 Y 1.247 1.04 1.151 0.36 0.6 0.51 Y 1.267 1.757 0.832 0.65 0.51 1.76 Y 1.509 0.252 0.371 1.76 Y 1.509 0.252 0.371 1.76 Y 1.509 0.252 0.371 1.76 Y 1.7	1.027 0.798 1.114 0.794 0.521 0.37 Y 1.12 1.247 0.867 1.336 0.798 0.682 Y NA NA NA NA NA NA NA N 0.709 0.841 0.906 0.84 0.843 0.559 Y	1.05 2.056 1.059 1.103 0.75 0.732 Y 1.054 1.14 1.271 1.225 0.713 0.81 Y 1.17 NA 0.250 NA 0.124 NA Y 0.806 NA 0.551 NA 0.191 NA Y NA
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Proposition	8900020973 PDE4A 8900020973 PDE4A 8900308301 PDHA1 8900024087 PDHA2	YHGHSMSDPGVSYR	2 24 686(688 1 5 293 293 UNIPROT	37 2 20 1,076 1,174 0,805 0,815 0,833 0,842 Y 337 2 2 NA	USGS 1.024 0.34 0.256 0.484 N 1.488 0.38 1.147 1.002 0.556 0.524 Y NA	1.20 0.97 1.294 1.104 0.581 0.554 Y NA NA NA NA NA NA N NA 1.311 NA 1.19 NA 1.501 N NA 1.311 NA 1.19 NA 1.501 N	1-A3D 1-A62 1-A8 0-449 0206 0229 Y 1.1865 0283 0382 0513 0573 Y NA 2529 NA 0 NA 0791 N NA N
Processor Proc	IP100002538 PDPK1 IP100383137 PES1 IP100384765 PKMYT1	PDK1 AMSFVGTAGYVSPELLTEK GAVAVLCLLTFPLPTSSR MYT1 DALDLSDINSEPPRGSFPSFEPR	1 15(16)17 284(285)286 1 16 479	100 24 56 1.007 0.76 1.321 1.126 0.716 0.547 Y 15 13 100 1.161 NA 1.005 NA 1.014 NA Y 30 7 10 NA NA NA NA NA NA NA NA	1.02 0.633 0.958 0.635 0.551 0.46 Y 1.249 1.757 0.966 1.199 0.753 0.655 Y 0.777 0.868 0.891 0.869 0.327 0.711 Y 0.861 0.891 0.393 0.377 0.779 0.786 Y 0.451 N.4 0 N.4 0.206 N.4 N 1.147 0.724 1.62 1.317 0.657 0.324 N	0.823 0.893 1.035 1.003 0.918 0.873 Y 0.813 0.88 1.096 0.984 0.755 0.878 Y 0.985 NA 1.128 NA 0.302 NA N	0.925 1.784 0.78 0.854 0.67 0.692 Y 1.15 1.536 1.545 1.201 0.802 0.986 Y 1.00 0.806 1.055 0.948 0.992 0.631 Y 1.00 NA 0.851 NA 0.772 NA Y 1.387 0.855 1.406 1.101 1.013 0.765 Y NA
Production Product P	IP100384765 PKMYT1 IP100002803 PKN1 IP100412672 PKN1 IP100412672 PKN1	PKN1 RSMSPPRGPK PKN1 RARPLPATPGAHARSSGR PKN1 TSTEGTPEFLAPEULSPPRDAR PKN1 TSTEGTPEFLAPEULTDTSYTR	1 43 143 143 UNIPROT 1 15 16 30 40 1 18 922 1 103 778/778/780	29 23 312 1.084 1.015 0.25 0.879 0.412 0.118 Y 13 13 16 0.563 0.473 0.297 0.155 0.088 0.082 Y 23 1 1 NA NA NA NA NA NA NA NA NA 47 5 6 NA NA NA NA NA NA NA NA	1.013	0.128 0 0.11 0.12 0.068 0.031 Y NA NA NA NA NA NA NA NA NA 0.505 NA 2.708 NA 0.414 N	1.001 1 1.000 1.04 0.0924 0.001 0.007 Y 1.1554 0.002 1.162 0.098 0.095 0.021 Y 0.0034 NA 0.0227 NA 9 0.005 0.040 0.027 0.004 0.077 0.004 Y NA
Properties Pro	IP100002804 PKN2 IP100413780 PKN3 IP100413780 PKN3	PROEZ GREDVSNFDDEFTSEAPILTPPREPR PROES TSTFCGTPEFLAPEVLTGEAVTR PROES YFEGEFTGLPPALTPPAPHSLLTAR	1 20 958 958 UNIPROT 1 12 3 716 717 718 718 UNIPROT 1 14 860 UNIPROT	40 1 1 NA	NA N	NA 1.085 NA 1.234 NA 0.585 N 2.096 0.197 1.458 0.213 3.599 0.33 N 0.534 NA 0.876 NA 0.833 NA N	NA N
Properties Pro	IP100410287 PRKAA1 IP100410287 PRKAA1 IP100410287 PRKAA1 IP100410287 PRKAA1	AMPKa1 DFYLATSPPDSFLDDHHLTRPHPER AMPKa1 IADFGLSHIMMSDGEFLRTSCGSPNYAAPEVISGR AMPKa1 SCGNSDSDAEAGGK AMPKa1 SCSNSDNP	1 7 371 1 16 108 1 7 523 1 7 511	58 24 104 0.827 0.977 0.835 1.073 0.991 0.532 Y 59 24 277 0.755 1.305 0.927 1.09 0.718 0.838 Y 19 24 158 1.78 1.123 1.088 0.997 0.764 0.543 Y 11 23 111 1.79 1.038 0.997 0.764 0.543 Y	0887 0873 0.887 0.45 0.324 0.332 Y 1.07 0.879 1.052 0.783 0.783 0.905 0.905 0.791 0.90 0.791 0.90 0.791 0.90 0.912 0.888 Y 1.088 1.013 0.899 0.729 0.533 0.311 Y 1.001 0.99 0.912 1.20 0.881 0.881 Y 1.00 0.99 0.912 0.90 0.912 0.912 0.90 0.912 0.90 0.912 0.90 0.912 0.90 0.912 0.90 0.912 0.912 0.90 0.912 0.912 0.90 0.912 0.90 0.912 0.90 0.912 0.90 0.912 0.90 0.912 0.90 0.912 0.90 0.912 0.90 0.912 0.90 0.912 0.90 0.912 0.90 0.912 0.90 0.912 0.90 0.912 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.9	0.817 0.515 0.737 0.625 0.583 0.425 Y 0.884 0.872 1.205 1.074 0.837 0.875 Y 1.057 0.951 1.21 1.034 0.833 0.809 Y	0.907 1.27 0.874 0.874 0.772 0.897 Y 1.231 0.796 1.294 0.856 0.596 0.851 Y 1.294 0.857 1.294 0.855 1.294 0.855 1.294 0.855 1.295 1.2
## PRODUCTION PROMES 1 St. 1	P100410287 PRKAA1 P100410287 PRKAA1 P100410287 PRKAA1	AMPKa1 SIDDEITEAKSCTATPOR AMPKa1 SIDDEITEAKSCTATPOR AMPKa1 SSEVSLTSSVTSLDSSPVDLTPR	1 7(11 497(501) 2.78.11 4978.501 538(537)538	35 23 41 0.84 0.853 1.043 0.046 0.053 0.549 Y 35 21 35 1.439 0.881 1.471 1.508 1.195 1.113 Y 41 15 16 1.074 1.367 1.062 0.476 0.389 0.856 N	0.731 0.802 0.668 0.553 0.336 0.291 Y 0.594 1.099 0.302 1.072 0.646 0.499 Y 0.738 0.736 0.8 0.667 0.373 0.274 Y 1.334 1.079 0.392 1.81 0.090 1.779 Y 1.06 0.736 0.842 0.096 0.479 0.093 0.855 0.479 0.093 0.475 0.093 0.093 0.475 0.093 0.093 0.475 0.093 0.	0.821 0.858 0.973 0.992 0.751 0.855 Y 0.874 1.12 0.916 1.106 0.859 0.888 Y 1.778 0.532 1.983 0.841 1.109 0.399 N	0.888 0.954 0.783 0.842 0.743 0.705 Y 1.232 0.986 1.348 0.907 0.762 Y 0.888 1.003 1.244 0.925 0.871 0.808 Y 0.891 0.792 0.484 0.779 0.849 0.442 0.925 0.871 0.808 Y 0.891 0.792 0.484 0.779 0.849 0.442 N 0.416 0.2372 0.881 0.484 0.541 0.144 0.908 0.442 N 0.416 0.878 0.484
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PRIOREMAN PRICE. PRICE DHAND/TETE/CORPOWN/EAR/COPPOX 1 8(21) 449444694 44-405 LANPHOT/LANPHOT 38 7 9.375 129 347 0294 14 1335 0475 19 1377 14 1505 18 1371 14	P100013905 PRKAB2 IP100013905 PRKAB2 IP100013905 PRKAB2 IP100013905 PRKAB2	LPL INSHMETWALLUPE GEHOVK DLSSSPPGPYGGEMYAFR MYGSTDDPSVFSLPDSK IPLIKSHNDFVALDLPEGEHOVK	1 6 107 107 UNIPROT 1 4 183 183 UNIPROT 1 AMINISTY 10401444771	29 18 51 1.301 1.513 1.203 0.203 1.203 0.506 Y 34 5 7 0.6 1.481 0.522 1.063 0.857 0.359 N 63 24 76 0.912 1.441 1.144 1.05 0.711 0.703 Y	1.466 0.842 0.959 0.787 0.336 0.355 Y 1.076 1.269 1.272 0.327 2.136 0.475 0.954 Y 0.466 0.355 Y 1.076 1.227 0.327 2.135 0.373 1.432 Y 0.48 NA 0.388 NA 0.422 NA N 0.551 NA 5.335 NA 1.015 NA N 0.813 0.394 0.9 0.297 0.359 0.465 Y 1.301 1.033 0.913 0.296 0.805 0.915 Y	1.327 0.7 1.096 0.848 0.875 0.848 Y 0.854 NA 1.013 NA 0.592 NA N 0.97 1.082 1.409 1.201 1.36 1.089 Y	NA 0.46 NA 1.109 NA 0.802 N 0.851 N 1.251 1.257 1.288 0.809 0.859 V NA 0.46 NA 1.100 NA 0.802 N 0.852 N 0.855 NA 3.832 NA 0.858 NA N NA N
	IP100385449 PRKCA IP100219628 PRKCB1	PKCs EHMMDGVTTKTFCGTPDYIAPEIIAYQPYGK PKCs ENIWDGVTTKTFCGTPDYIAPEIIAYQPYGK	1 89(11 403)494(498 494, 498 LINIPROT LINIPROT 11(15 500)504 500, 504 LINIPROT LINIPROT	38 7 9 3.757 1.29 3.472 0.914 1.338 0.483 N 45 24 42 1.063 1.25 0.845 0.922 0.907 0.8 Y	NA 0.0396 NA 0.798 NA 0.534 N 1.009 0.492 0.872 0.469 0.9 0.532 Y 1.154 1.194 1.163 0.885 0.692 0.467 Y	NA 0.569 NA 0.563 NA 0.706 N 0.871 0.441 1.413 0.973 0.614 0.831 Y	1.371 NA 1.055 NA 1.236 NA N NA 25.28 NA 4.371 NA 14.955 N 1.064 1.569 0.904 0.807 0.868 0.938 Y 1.148 0.921 1.154 0.457 0.815 0.466 N

	Abbreviations: SSM; number of spectrum-to-	s-sequence matches, NA; not available.				bosutinib applied to lysate	bosutinib applied to cultured cells	dasatinib applied to lysate	dasatinib applied to cultured cells	imatinib applied to lysate	imatinib applied to cultured cells
	IPI acc. no. Protein Kinase	Phospopeptide sequence	# of modified possible location sites in position in modification P-site	of possible location of in locations of known p-si	of source database of known p-site highest Found in Total site (Uniprot, PhosphoElm, Phosida) mascot # of SSM	kinobeads binding relative to vehicle at	used for kinobeads binding relative to vehicle at used for quantitation quantitation	kinobeads binding relative to vehicle at used for quantitatic	kinobeads binding relative to vehicle at used for quantitation	kinobeads binding relative to vehicle at used for quantitation	kinobeads binding relative to vehicle at used for quantitation
			peptide peptide positions in protein peptide	n phosphorytatio n site(s) in	ion experime score nts (max.						
				protein	24)		001-44 002-44 01-44 02-44 1-44 6-44	00144 00244 0144 0244 144 1044	00144 00244 0144 0244 144 644	001-44 000-44 01-44 02-44 1-44 10-44	
	IPI00219628 PRKCB1 PKCb I IPI00219628 PRKCB1 PKCb I	HPPVLTPPDQEVIR NDQSEFEGFSFVNSEFLKPEVK	1 6 1 5 11 15	641 654 660 664	65 24 85 64 24 15	2 1.127 0.913 1.035 0.847 0.565 0.472 6 0.931 1.088 0.898 0.925 0.864 0.926	Y 0.743 0.887 0.889 0.579 0.393 0.379 Y Y 0.772 0.732 0.612 0.689 0.575 0.747 Y		0.827 0.678 0.935 0.927 0.58 0.425 Y 0.888 0.632 1.453 1.144 0.862 0.853 Y	1.211 1.71 1.183 0.937 0.695 0.524 Y 1.063 1.112 0.906 0.909 0.959 0.812 Y	1.297 1.189 1.186 1.021 0.625 0.597 Y 2.51 1.517 2.329 1.316 1.186 0.873 Y
	IP100219628 PRKCB1 PKCb II IP100219628 PRKCB1 PKCb I	NIDQSEFEGFSFVNSEFLKPEVK TECGTPDYIAPEIIAYOPYCK	2 5/11/15	654)660(664	500 LINIPROT 79 24 5	5 NA NA NA NA NA NA NA NA NA 1174 0.599 1.003 0.633 0.757 0.589	N NA 0.787 NA 0.389 NA 0.388 N V 1525 113 0.751 0.748 0.504 0.98 V	1.004 0.77 1.055 0.895 1.09 0.888 Y 0.973 0.936 0.886 0.76 0.511 0.717 Y	2.95 0.867 3.504 1.467 1.571 0.51 N 0.777 0.795 1.061 1.015 0.607 0.554 Y	1.027 1.469 0.898 0.967 0.837 0.792 Y 1.178 1.829 0.783 1.024 0.882 0.809 Y	2.095 1.652 1.851 0.875 1.169 0.692 Y 1.76 1.29 1.714 1.014 0.937 0.694 Y
	IP100329236 PRKCD PKCd / IP100329236 PRKCD PKCd I	ASTFCGTPDYIAPEILQGLK RSDSASSEPVGIYQGFEK	1 2 3 1 13	506 507 313	507 UNIPROT 55 22 3 313 PhosphoELM 50 4	7 0.638 0.916 1.157 0.706 0.485 0.649 4 NA NA NA NA NA NA NA	Y 0.751 0.737 0.754 0.535 0.423 0.711 Y N 1.067 NA 0.705 NA 0.582 NA N	1.139 0.938 1.067 1.115 1.237 0.593 Y 0.986 NA 0.71 NA 0.916 NA N	1.021 0.74 1.09 1.206 0.729 0.548 Y 1.36 0.843 1.388 0.711 0.899 0.689 N	1,005 0,707 1,432 0,69 1,195 0,442 N NA NA NA NA NA NA NA N	1.22 0.537 2.311 0.692 1.167 0.474 N NA NA NA NA NA NA N
See Legel See Le	IP100029196 PRKCQ PKC1 /	ALINSMDQNMFR NESEMBERMER	1 5	718 728	718 UNIPROT 38 13 2	5 1.133 1.508 1.167 1.514 0.446 0.8 3 1.624 1.585 1.699 1.552 1.05 0.601	Y 1.772 0.492 1.802 0.299 0.235 0.268 N Y 1.587 1.065 1.295 0.854 0.656 0.406 Y	1.047 NA 0.801 NA 0.517 NA Y 1.79 1.519 1.652 1.671 1.076 0.983 Y		1.426 NA 1.239 NA 1.413 NA N 1.699 1.83 1.697 1.189 1.106 0.697 Y	0.714 NA 0.667 NA 0.649 NA N
See Legel See Le	IP100029196 PRKCQ PKC1 1 IP100009334 PRKD2 PKD2 I	TNTFCGTPDYIAPEILLGQK LGTSESLPCTAEELSR	1 3			8 1.352 1.355 1.01 1.282 0.61 0.179 8 1.515 1.229 1.106 0.778 0.954 0.371	Y 0.919 0.696 0.822 0.606 0.648 0.326 Y Y 0.91 1.157 0.797 1.116 0.618 0.493 Y	1.554 1.141 1.201 1.223 0.845 1.381 Y 0.723 1.001 2.12 1.184 3.199 0.383 N	0.833 0.876 0.884 1.055 0.762 0.785 Y 0.756 1.232 0.989 1.167 0.672 0.773 Y	1.417 1.489 0.846 1.097 0.516 0.749 Y NA NA NA NA NA NA NA	1.694 2.003 1.052 1.404 1.065 0.751 Y 0.807 NA 1.307 NA 0.656 NA N
	IP100009334 PRKD2 PKD2 I IP100009334 PRKD2 PKD2 I	RLSSTSLASGHSVR	1 3 4 5 2 3 4 5	197(198(199 197, 198	UNIPROT,PhosphoELM 61 24 5 UNIPROT,PhosphoELM 31 12 2	7 1.062 1.029 1.398 1.017 0.764 0.669 1 NA NA NA NA NA NA NA	Y 0.858 0.799 0.778 0.959 0.458 0.476 Y N NA NA NA NA NA NA NA NA	1.13 1.591 1.238 1.262 0.825 0.828 Y 1.26 0.888 0.948 1.018 0.53 0.914 Y	0.756 1.271 1.273 1.379 0.825 0.832 Y 0.797 0.9 1.337 1.092 0.788 0.711 Y	1.096 2.632 0.921 1.265 0.887 0.942 Y 1.55 2.538 1.456 0.785 1.072 0.589 Y	0.832 0.989 1.03 2.029 0.771 1.381 Y 1.285 1.505 1.354 1.327 1.02 0.96 Y
Seconday	IP10009334 PROD2 PRO2 S IP100413981 PTK2 FAK II	LQPQEISPPPTANLDR LQPQEISPPPTANLDR	1 7	932	35 9 1	6 1.632 0.79 1.805 1.152 0.82 0.443	Y 1.13 0.355 0.886 0.38 0.509 0.126 Y		0.619 NA 0.875 NA 0.532 NA N	NA NA NA NA NA NA NA NA	NA
Mathematical Content of the conten	IP100413961 PTK2 FAK 1	THLGTGMERSPGAMER	1 1 78	42	17 17 17 18 19 19 19 19 19 19 19 19 19 19 19 19 19	7 1.475 0.785 1.413 0.731 0.897 0.4 1 0.904 0.922 0.781 0.62 0.324 0.125	Y 0.589 0.546 0.723 0.485 0.283 0.479 Y 0.735 0.895 0.481 0.298 0.163 0.109 Y	0.683 NA 0.924 NA 0.461 NA Y 0.914 0.748 0.797 0.788 0.571 0.571 Y	1.746 0.523 1.241 0.616 0.862 0.576 Y	0.789 4.051 0.778 1.395 0.609 0.238 Y	1.127 2.484 1.102 2.382 0.75 0.938 Y
State Stat	IP100413961 PTK2 FAK 1 IP100029702 PTK2B PYK2 I	YMEDSTYYKASK KDGEKRNSLPQIPMLNLEAR	2 788 5988599 1 8		19 15 2 375 UNIPROT 53 24 38	5 1.143 0.893 0.821 0.495 0.129 0.08 4 1.091 0.914 1.462 1.131 0.782 0.413	Y 0.337 NA 0.119 NA 0.046 NA Y Y 0.818 0.788 1.105 1.136 0.527 0.389 Y	0.925 0.512 0.419 0.357 0.16 0.188 Y 0.99 0.858 1.321 1.509 0.624 0.691 Y	NA 0.064 NA 0.073 NA 0.046 Y 0.825 0.722 1.557 1.355 0.86 0.631 Y	1.117 1.173 0.822 0.914 0.992 0.71 Y 1.216 1.299 1.733 1.338 0.85 0.86 Y	1.238 1.11 1.136 0.783 0.918 0.761 Y 1.137 1.116 1.656 1.673 0.939 0.661 Y
State Stat		SHLSESCSIESDIYAEIPDETLR YIEDEDYYK	1 718	389(392(394)396 579(580 579, 580	UNIPROT.UNIPROT 45 18 4	3 NA NA NA NA NA NA NA N 1 279 0 884 1 073 0 707 0 683 0 337	N NA 2.728 NA 1.651 NA 0.511 N Y 0.374 0.228 0.094 0.117 0.027 0.087 Y	NA NA NA NA NA NA N 0.873 0.958 0.765 0.896 0.596 0.534 V	NA O NA O NA O N NA NA NA NA NA N	NA 0.969 NA 1.54 NA 0.366 N 1.192 1.37 0.793 1.018 0.961 0.744 Y	NA NA NA NA NA NA NA N 1.01 0.996 1.107 1.085 1.038 0.741 Y
State Stat	IP100029702 PTK2B PYK2 Y IP100219132 PTPN18 I	ENCAPLYDDALFLR	2 788 5798580 1 7	314	72 7	8 1.133 NA 0.936 NA 0.386 NA 9 1.671 1.539 1.332 1.38 0.44 0.724	N NA NA NA NA NA NA N N 0.682 0.284 0.233 0.217 0.121 0.041 Y	0.918 0.593 0.306 0.605 0.43 0.375 Y 1.011 NA 0.433 NA 0.314 NA N	NA N	1.004 1.06 0.913 0.923 0.886 0.765 Y NA NA NA NA NA NA N	NA NA NA NA NA N
See	IP100021917 RIPK2 RIPK2 8	KAQDCYFMK	1 8	381	389 UNIPROT 52 19 2 29 23 3	85 1.333 0.817 1.054 0.664 0.627 0.154 85 1.09 0.968 1.006 0.939 0.927 0.679	Y 0.358 0.54 0.104 0.178 0.037 0.08 Y Y 0.802 1.05 0.629 0.676 0.352 0.508 Y	1.336 1.725 0.892 0.388 0.284 0.342 N 1 0.841 0.378 0.224 0.245 0.196 Y	0.561 0.126 0.447 0.11 0.199 0.072 Y	1.166 2.498 0.997 1.405 1.509 0.884 Y 0.958 0.932 0.932 0.856 0.729 0.784 Y	
See			1 35	174 176	39 16 3 11 16 2	5 1.06 0.807 1.208 0.676 0.916 0.762 5 1.004 0.961 0.952 0.873 0.691 0.657	Y 0.797 0.976 0.796 0.814 0.461 0.893 Y Y 0.863 0.926 0.626 0.912 0.332 0.426 Y	0.999 NA 1.213 NA 0.858 NA N 1.235 0.823 0.522 0.885 0.176 0.225 N	NA 0.591 NA 0.501 NA 0.263 N	1.024 6.519 1.076 1.874 0.684 0.511 Y 1.061 3.558 1.042 1.346 0.948 1.005 Y	
Section Sect	IP100021917 RIPK2 RIPK2 S IP100021917 RIPK2 RIPK2 S	SUPAPOPOPER VORSPSCHELLUNK SUPAPOPOPER SUPAPOPOPER S	1 1	363	65 23 6	0 1.507 0.809 1.355 0.927 1.050 0.842 4 1.391 1.109 0.797 0.905 0.712 0.619	Y 0.521 0.776 0.501 0.578 0.373 0.384 Y	0.779 0.316 0.352 0.77 0.78 0.007 Y	0.446 0.281 0.273 0.202 0.089 0.089 Y	0.794 1.519 0.822 0.849 0.782 0.788 Y	1.382 0.914 1.684 0.951 0.962 0.719 Y
See	IPIONAT7982 RPRRKA1 RSKS A	AYSECCTVEYMAPEVVNR	1 3	230 378	99 23 6 45 4	1 1.384 1.123 1.165 1.052 0.928 0.731	Y 0.796 0.79 0.752 0.74 0.569 0.578 Y N NA NA NA NA NA NA NA		0.579 0.885 1.003 0.968 0.756 0.634 Y NA NA NA NA NA NA NA	1.079 1.642 0.965 1.066 0.907 0.684 Y	1.118 1.128 1.195 1.135 0.752 0.916 Y
See		TPKDSPGIPPSAGAHQLFR	1 3	389 372	75 24 11 64 24 25	5 1.1 1.202 0.961 0.871 0.894 0.706 4 1.116 1.021 0.905 0.92 0.732 0.692	Y 0.678 0.634 0.357 0.319 0.163 0.219 Y 0.626 0.502 0.374 0.356 0.18 0.175 Y		0.258 0.285 0.335 0.38 0.214 0.204 V	0.927 1.389 0.82 0.799 0.762 0.559 Y 1.12 1.76 1.057 1.019 0.751 0.751 Y	1.036 1.075 0.842 0.641 0.457 0.383 Y 1.197 0.999 1.002 0.667 0.363 0.331 Y
State Stat	IPI00020898 RPS8KA3 RSK2 / IPI00020898 RPS8KA3 RSK2 I	AYSFCGTVEYMAPEVVNR DSPGIPPSANAHQLFR	1 3 1 2	227 369	227 UNIPROT 99 22 40 369 UNIPROT 57 22 7	7 1.384 1.123 1.165 1.062 0.928 0.731 1 1.054 0.872 0.881 0.735 0.472 0.549	Y 0.796 0.79 0.752 0.74 0.569 0.578 Y 0.683 0.578 0.458 0.511 0.316 0.29 Y	1.211 1.08 1.026 1.193 0.924 0.98 Y 0.925 1.013 0.742 0.819 0.497 0.538 Y	0.579 0.885 1.003 0.958 0.756 0.834 Y 0.372 0.415 0.431 0.455 0.356 0.409 Y	1.079 1.642 0.965 1.086 0.907 0.884 Y 1.14 0.842 0.854 0.802 0.817 0.684 Y	1.121 1.128 1.191 1.135 0.753 0.916 Y 1.107 1.171 1.07 0.894 0.531 0.56 Y
State Stat		GFSFVAITSDDESQAMQTVGVHSIVQQLHR PKPSNPIYNEPDEPIAFYAMGR	1 3 2 8&18 290&300		290 PhosphoELM 43 1	0 0.737 0.302 0.623 0.726 0.224 0.133 1 NA NA NA NA NA NA NA	N 2207 NA 0.526 NA 0.582 NA N N NA NA NA NA NA NA N	1.534 1.057 1.11 1.206 0.676 0 N NA NA NA NA NA NA NA N	NA 0.978 NA 1.122 NA 0.49 N NA NA NA NA NA NA N	0.962 NA 1.396 NA 0.701 NA N NA 1.441 NA 0.87 NA 0.471 N	1.274 0.678 1.058 0.439 0.539 0.466 Y NA NA NA NA NA NA N
Property state Prop	IP100021326 SHC1 6	ELFDDPSYVNVQNLDK HC9D-MV9TB	1 8		428 UNIPROT 79 22 5 139 UNIPROT 27 23 7		Y 0.184 0.07 0.099 0.068 0.078 0.057 Y 0.124 0.194 0.119 0.158 0.051 0.1 Y	0.992 0.175 0.138 0.28 0.028 0.16 Y 0.857 0.428 0.31 0.224 0.13 0.185 Y	0 0.073 0.054 0 0 0.013 N 0.165 0.136 0.178 0.162 0.135 0.075 Y	1.171 1.087 0.846 0.685 0.457 0.18 Y 1.243 1.51 0.994 0.666 0.34 0.235 Y	0.751 0.755 0.76 0.571 0.191 0.255 Y 0.89 0.489 0.794 0.471 0.214 0.144 Y
Part	PRODUCTS ARYLSULFATASE B (PRODUCTS) B (PRODU	MLLLMEPYNLILGRR	1 8	8	37 3 38 1	3 2.340 NA 2.005 NA 0.979 NA 1 NA NA NA NA NA NA NA	N NA	NA N		NA N	
Part	IPI00234463 SIM TO CKI DELTA I	LRCTOFVAPPTRI TPTSHTANTSPREVSOMER	1 11/14/16/17/19/22/23/28	449 452 454 45	455 UNIPROT 44 10 2	0 1.231 2.494 1.457 1.881 1.257 0.139	N 0.588 0.999 0.739 0.862 0.276 0.216 N	1.815 NA 1.985 NA 1.245 NA N	1.119 0.625 1.759 0.888 0.782 0.479 N	2.056 2.168 1.133 1.359 1.256 0.738 N	NA 0.611 NA 0.418 NA 0.136 N
Free Proper less of the proper l			3(7)9	189 193 195	189 UNIPROT 73 16 3	77 1.059 0.288 1.46 0.298 0.59 0.17	N 0.258 NA 0.4 NA 0.141 NA N	1.367 1.095 1.24 1.299 0.995 0.544 Y NA 1.211 NA 1.487 NA 0.909 N	0.991 0.887 1.201 1.336 0.646 0.405 Y		
See	IP100465291 SNF1LK2 OIK I	DI NEI EDNESI KDIMI ANDESER	1 10	587	41 2 587 UNIPROT 53 23 1	2 NA NA NA NA NA NA NA 0 1.146 0.92 0.959 0.638 0.561 0.378	N NA NA NA NA NA NA NA NA N Y 0.763 0.533 0.683 0.358 0.525 0.378 Y	NA N	NA NA NA NA NA N	NA N	NA NA NA NA NA N
Property state Prop	IP100465291 SNF1LK2 QIK II IP100328867 SRC SRC II	KEPEERPTFEYLQAFLEDYFTSTEPQYQPGENL	1 35 1 27	536	36 1 536 UNIPROT 69 16 1	1 NA NA NA NA NA NA 6 NA 0.662 NA 0.488 NA 0.248	N NA NA NA NA NA NA NA N N 0.547 0.416 0.21 0.108 0.272 0.022 N	NA N	0.105 0.068 0.048 0.109 0.126 0 N	NA NA NA NA NA NA NA N 1,632 1,695 0,815 1,848 0,327 0,526 N	NA NA NA NA NA NA NA N 0.72 1.522 0.737 1.408 0.529 1.109 N
See	IP100328867 SRC SRC I IP100328867 SRC SRC I	RRSLEPAENVHOAGGGAEPASOTPSKPASADGHR	1 7	425	425 UNIPROT 61 23 25 17 UNIPROT 34 17 4	5 0.84 0.502 0.31 0.118 0.083 0.033 2 1.039 0.827 0.842 0.672 0.427 0.254	Y 0.301 0.145 0.071 0.044 0.031 0.02 Y Y 0.932 0.469 0.491 0.268 0.166 0.136 Y	0.501 0.241 0.081 0.088 0.03 0.033 Y 0.597 0.404 0.313 0.171 0.128 0.177 Y	0.034 0.037 0.035 0.063 0.02 0.028 Y NA 0.198 NA 0.224 NA 0.163 N	1.1 1.22 0.986 0.904 0.96 0.812 Y 1.392 0.998 1.192 0.811 0.948 0.629 Y	1.283 0.828 1.488 0.892 1.092 0.954 N
See	IP100328293 SRRM1 IP100999730 SRRM2	TRHSPTPQQSNR ARSRTPPSAPSQSR	1 1/4/6 2 3/5/8	2407 2409 241:2407, 2409	11 UNIPROT,PhosphoELM,PhosphoELM 31 3 UNIPROT,UNIPROT 34 6	3 1.159 1.23 0.877 2.719 0.896 0.798 6 NA NA NA NA NA NA NA	N NA NA NA NA NA NA N N 0.856 0.63 0.744 0.561 0.511 0.449 N	NA NA NA NA NA NA NA NA	NA N	NA N	
Seel Methods 1. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	IP100039689 SRRM2	VSGRTSPPLLDR EASTDEHDEHDENCATORIAN	1 1516	917(920)921	38 4 12 13 1	9 1.512 0.785 0.888 0.509 0.726 0.542	N 0.605 0.539 0.63 0.67 0.28 0.495 Y	1.051 1.314 0.893 1.142 0.658 1.076 Y	NA 0.846 NA 1.425 NA 0.808 N 0.845 0.8 0.962 0.543 0.486 0.317 Y	NA NA NA NA NA NA	0.918 0.913 1.302 1.348 0.985 1.03 N 0.705 NA 0.831 NA 0.338 NA N
From Profession 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	IP100154910 STS-1 //	NARELYSK VNROPOPOK	1 7	19		4 1.027 0.894 0.825 0.526 0.526 0.109	Y 0.111 0.042 0.102 0.102 0.038 0.039 Y 0.213 0.17 0.181 0.138 0.1 0.111 Y	0.837 0.832 0.389 0.255 0.083 0.079 Y	0.062 0.062 0.139 0.128 0.074 0.055 Y	1.076 1.071 0.924 0.827 0.616 0.48 Y	0.688 0.677 0.541 0.423 0.185 0.125 Y 0.642 0.435 0.503 0.362 0.216 0.101 Y
Seel Properties (1) 1 (1		ADENIYK EALDMYTELYESBYADBEEIRBY	1 5)6	348/352 348 352	INIPROT INIPROT 68 24 14			1.154 1.115 0.789 0.891 0.491 0.282 Y	0.32 0.044 0.09 0.071 0.062 0.031 Y	1.329 1.251 1.048 0.87 1.004 0.726 Y	0.617 0.636 0.911 0.986 0.636 0.666 Y
Seel Properties (1) 1 (1	IP100018597 SYK SYK I IP100018597 SYK SYK I	EALPMDTEVYESPYADPEERPK EYVKOTWNLOGGALEGAIISOKPOLEK	2 108.14 3488352 1 2	348, 352	UNIPROT,UNIPROT 65 17 3 59 19 5	0 1.261 0.841 1.286 0.483 0.526 0.2 3 1.268 0.747 1.261 0.929 0.464 0.084	N 0.392 0.131 0.103 0.119 0.044 0.014 N Y 0.276 0.149 0.069 0.042 0.038 0.021 Y	0.615 1.295 0.716 1.163 0.617 0.303 Y 1.102 NA 0.805 NA 0.424 NA Y	NA N	0.803 0.845 0.935 0.847 0.636 0.465 Y 1.182 0.95 0.992 0.956 0.848 0.703 Y	0.913 1.402 1.345 0.968 1.147 0.534 N 0.515 0.557 0.672 0.807 0.582 0.834 Y
Property of the column Property of the col	IP100018597 SYK SYK I IP100018597 SYK SYK (IKSYSEPK OESTVSEMPYERELAPWAADK	1 4	296 323	31 23 18 323 UNIPROT 74 24 7	4 1.147 1.051 1.047 0.722 0.626 0.253 7 1.207 1.239 0.959 1.008 0.689 0.238	Y 0.359 0.243 0.174 0.122 0.08 0.091 Y Y 0.388 0.235 0.131 0.085 0.082 0.022 Y	1.101 1.063 0.832 0.718 0.463 0.264 Y 1.041 0.918 0.804 0.498 0.595 0.221 Y		1.062 1.15 0.986 1.052 0.906 0.825 Y 1.148 1.164 0.692 1.026 1.03 0.651 Y	
Property of the column Property of the col	IP100419789 TANK IP100299166 TANK S	GLCRDEEDTSFESLSK SLGSPLLHER	1 10	129 129	35 24 5 29 21 5	4 1.167 0.945 0.993 0.833 0.839 0.282 4 1.23 1.113 1.167 0.978 0.818 0.421	Y 1.077 1.258 0.968 0.77 0.802 0.308 Y Y 0.727 NA 0.618 NA 0.504 NA N	1.012 0.954 0.973 0.834 0.844 0.861 Y 1.142 1.337 0.984 1.411 0.982 1.067 Y	1.109 0.998 1.407 1.155 1.098 0.874 Y 0.954 1 0.968 1.289 0.734 0.708 Y	1.074 1.178 1.003 0.82 1.06 0.771 Y 1.132 1.483 0.944 1.008 1.015 0.917 Y	0.903 1.003 0.95 1.011 1.121 1.018 Y
Profession Pro	IP100410485 TAOK3 TAOS I IP100293613 TBK1 TBK1 I		1 7	716	68 13 1 13 23 5	4 1.142 0.752 1.407 0.601 0.608 0.886 4 1.201 0.765 1.217 1.153 0.785 0.481	N 1.03 0.562 1.679 0.549 1.002 0.4 N Y 1.074 1.037 0.802 0.714 0.395 0.167 Y	1.236 0.605 1.364 0.593 1.413 0.741 N 1.431 0.994 1.113 0.886 0.997 0.785 Y	0.774 1.502 0.76 1.852 1.062 2.305 N 0.78 0.809 1.185 1.047 0.504 0.543 Y	0.719 NA 0.656 NA 0.732 NA N 1.024 1.403 0.896 1.754 0.956 0.844 Y	
Profession Pro	IP100293613 TBK1 TBK1 I	MOSTSNHLWILLSDILGGGATANVFR	3(4)5)12	3 4 5 12	3/ 22 2 46 22 6	1 0.735 2.817 0.834 2.003 0.448 1.256	Y 0.653 0.655 0.663 0.513 0.435 Y	1.195 0.003 1.006 0.006 0.007 0.008 Y	2.648 0.923 3.731 0.929 2.068 0.563 Y	1.362 1 1.344 1.027 0.873 0.551 Y	1.032 1.916 2.234 1.472 0.965 1.513 Y
From the proper shows a proper shows	IP100008084 TBKBP1 I IP100008084 TBKBP1	DGSLLEVEKVSLOOR HSPAPOCPSPSPPAR	1 11 3408391	105	20 20 2 19 20 3	8 0.795 0.905 0.773 0.885 0.582 0.253 77 0.835 0.872 1.351 1.018 1.177 0.489	Y 0.853 NA 0.838 NA 0.43 NA Y V 0.713 0.613 0.68 0.48 0.42 0.331 Y	1.025 0.889 0.94 1.088 0.894 0.81 Y	0.974 1.073 2.081 1.614 1.701 1.22 Y 0.751 0.588 1.292 1.254 0.832 0.538 N	0.927 1.854 0.91 1.176 0.703 0.439 Y 1.742 4.723 1.286 1.644 1.122 0.701 Y	1.009 1.208 0.899 0.874 0.723 0.612 N 1.337 1.083 1.084 1.313 0.627 1.248 N
Proper P	IP100008084 TBKBP1 (0	QQQGLQDAAFSNLSPPPAPAPPCTDLDLHYLALR RSPASPSCPSPAPQR	1 11 14 24 1 285	181 184 194 385 388	39 1 31 13	1 1.443 NA 0.511 NA 0.509 NA 77 1.237 0.943 1.025 1.315 0.792 0.702	N NA NA NA NA NA NA NA NA N N 0.765 0.267 0.667 0.305 0.396 0.161 Y	NA N	NA N	NA N	NA N
Progeous	IPI00008084 TBKBP1 I	RSPASPSCPSPVPQR RSPVPPCPSPQQR	2 2.9 3728379		39 17 2 42 23 5	8 2.01 1.508 1.011 1.984 1.243 0 8 0.941 0.76 0.912 0.595 0.63 0.54	N 1.376 0.694 0.604 0.653 0.4 0.156 N V 0.561 1.016 0.892 0.708 0.563 0.553 V	0.985 1.009 0.877 0.922 0.4 0.624 N 1.079 0.842 1.121 1.185 0.485 0.402 V	0.899 0.61 1.275 1.161 0.575 0.398 Y 2.315 1.075 1.574 1.233 0.899 0.414 Y	0.904 1.183 1.01 1.027 0.855 0.832 N 1.236 4.118 0.999 0.782 0.776 0.535 Y	0.271 3.552 0.919 0.85 0.835 0.821 N
Second 1989	IP100008084 TBKBP1 IP100008084 TBKBP1 IP100008084 TBKBP1	RSYSELAEGAAYAGASPPWLQAEAATLPKPR SGGQRHSPLSQR	1 2 3 4 12 16 1 1 7	329 335	53 4 24 22 8	4 0.746 NA 1.106 NA 0.588 NA 3 1.187 0.929 1.196 0.922 0.814 0.465	N NA 1.168 NA 1.349 NA 0.283 N Y 0.827 0.905 0.88 0.826 0.45 0.272 Y	3.086 NA 2.048 NA 0.792 NA N 1.125 1.313 1.122 1.548 0.772 1.158 Y	0.943 0.808 1.338 1.342 0.809 0.608 Y	NA N	1.149 1.085 1.503 1.351 0.955 0.915 Y
Properties Pro		SPVPPSCPAPQPRPPPPPPGER	1 1)8 1 1)6	415 420	49 17 63 13	3 1.077 0.845 0.86 0.92 0.533 0.205 3 1.232 0.97 1.239 1.015 0.67 0.4	Y 0.918 0.822 0.848 0.774 0.471 0.219 Y 0.74 1.822 0.735 1.998 0.384 0.383 Y	0.834 0.573 1.008 0.941 0.585 0.283 Y 1.385 0.725 1.431 0.889 0.477 0.631 Y	NA 0.701 NA 0.805 NA 0.862 N 1.018 NA 0.922 NA 0.447 NA N	0.888 1.229 0.629 1.609 0.493 0.788 N NA NA NA NA NA NA NA NA	NA NA NA NA NA N
Properties Pro	PRODUCES TEC TEC TEC	ETTTSPKKYYI AFK	2 3 4 5	305/306/307/308	17 12 1	5 NA 1.16 NA 0.514 NA 0.668				1.623 1.22 0.946 1.048 1.205 0.837 Y	0.792 NA 0.367 NA 0.732 NA Y
Part		SOSDIFSR	1 7	367/369		0 1.095 0.946 0.952 0.649 0.398 0.09 11 1.136 1.171 1.269 1.173 1.095 1.045	V 0.911 0.908 0.788 0.931 0.87 0.875 V	1.044 0.95 0.642 0.525 0.215 0.122 V	0.142 0.056 0.094 0.078 0.057 0.043 Y	NA NA NA NA NA NA N	
Part	IDIOGRAPHIC TEOUS TEOUS I	WCGI BOGGEEI HOEACBEACB	1 3 7 2 387 4278431	427 431	80 23 47 2		N 0.518 0.507 0.47 0 0.572 0.184 N N NA 0.691 NA 0.552 NA 0.604 N	NA NA NA NA NA NA NA NA	NA NA NA NA NA NA NA NA	NA NA NA NA NA NA NA N	NA NA NA NA NA NA NA NA
PROCESSION LANGE STATE AND ASSESSION LANGE S	IP100102677 TESK2 TESK2 V	QNSDPTSENPPLPTR	2 387 4568460 1 3	640	32 1 56 18 2	1 NA NA NA NA NA NA NA 7 1.655 0.735 0.344 0.483 0.162 0.013	N NA 0.556 NA 0.45 NA 0.128 N N 0.809 0.619 0.226 0.518 0.111 0.151 N	NA N	NA NA NA NA NA NA NA N 3.205 0.616 2.205 0.629 0.775 0.232 N	NA N	NA NA NA NA NA NA NA N 0.762 0.562 1.115 1.022 0.918 0.355 Y
PROPERATION 1 1 50 50 Pemperhalis 1 1 50 Femperhalis 1 1 50	IP100145805 TNIK ZC2/TNIK S IP100145805 TNIK ZC2/TNIK S	SESFSISGVOPARTPPMLRPVDPQIPHLVAVK	1 4 1 13(5)7	568 570 572 574	31 12 1	6 0.968 0.939 1.02 0.687 0.478 0.269 4 1.118 0.818 0.753 0.426 0.501 0.329	Y 0.594 0.574 0.597 0.419 0.225 0.327 Y N 0.581 NA 0.423 NA 0.189 NA N	0.983 1.029 1.001 0.95 0.709 0.453 Y 1.01 1.415 1.116 0.892 0.882 0.707 Y	0.895 0.75 0.813 0.725 0.431 0.626 Y 1.164 NA 1.482 NA 1.002 NA N	NA N	0.914 0.622 1.423 0.967 1.106 0.648 Y 0.736 0.945 1.436 0.893 0.651 0.766 Y
PROPERATION 1 1 50 50 Pemperhalis 1 1 50 Femperhalis 1 1 50	IPI00145805 TNIK ZC2/TNIK T IPI00022633 TNK1 TNK1 0	TTSISPALAR GISRSLESVLSLGPRPTGGGSSPPEIR	1 5 2 385 5008502		502 PhosphoELM 35 23 8	2 1.048 0.9 0.897 0.891 0.624 0.393 9 1.549 1.087 1.614 1.218 1.013 0.873	Y 0.898 0.551 0.484 0.387 0.204 0.181 Y 0.769 0.803 0.736 0.729 0.481 0.802 Y	0.71 0.894 0.943 0.756 0.789 0.479 N 1.334 1.452 1.125 1.323 1.019 1.333 Y	1.175 0.784 1.356 0.779 0.527 0.537 Y 1.176 0.759 1.47 1.178 1.488 0.442 Y	NA N	
## PROMETICAL PROPERTY NAME: A PROMETICAL PROMETICAL PROPERTY NAME: A PROMETICAL PROPERTY NAME: A PROMETICAL PROMETICAL PROPERTY NAME: A PROMETICAL PROMETICAL PROPERTY NAME: A PROMETICAL PROPERTY NAME: A PROMETICAL PROMETICAL PROPERTY NAME: A PROMETICAL PROPERTY NAME: A PROMETICAL PROMETICAL PROPERTY NAME: A PROMETICAL PROPERTY NAME: A PROMETICAL PROMETICAL PROPERTY NAME: A PROMETICAL PROMETICAL PROPERTY NAME: A PROMETICAL PROMETICAL PROMETICAL PROMETICAL PROPERTY NAME: A PROMETICAL PROMETICAL PROMETICAL PROPERTY NAME: A PROMETI	IP100022633 TNK1 TNK1 5		1 1	902 661	502 PhosphobLM 72 22 4 15 20 3	8 1.064 1.143 0.86 1.002 0.715 0.48 11 1.076 1.295 0.83 1.25 0.53 0.655	Y 0.902 0.848 0.999 0.716 0.73 0.687 Y Y 1.326 0.947 1.023 0.924 0.543 0.447 Y	0.804 0.522 1.246 0.56 0.788 0.544 Y 1.475 0.816 1.53 1.591 0.87 0.984 Y	0.712 0.723 1.389 1.363 1.098 0.72 Y 1.025 1.122 1.496 1.283 0.869 0.531 Y	NA N	1.819 1.285 1.989 1.449 1.158 1.219 Y
## PROMETED TOTAL ACT VITAGING/HOME 1 1 1 1 50 ST 100 ST 1	19100442025 TNK2 ACK II 19100442025 TNK2 ACK II	ALPUNDUTY WIGHTS KPTYDPVSEDQDPLSSDFKR KTSSAROOSACECSI ON TO LOEVIN S	1 4	596 596	31 3 59 16 1	9 1.786 NA 1.153 NA 0.556 NA 9 1.166 0.861 0.85 0.388 0.445 0.153	Y 0.936 NA 0.422 NA 0.203 NA N		0.697 NA 0.273 NA 0.231 NA N	NA NA NA NA NA NA NA	
## PROPERTY LIGHER 1 4 34 5	IP100442025 TNK2 ACK 3	YATPOVIQAPGPR	1 1 1 2 48110	5/7/11	905 PhosphoELM 76 11 1	6 0.774 0.922 0.715 0.322 0.341 0.163	Y 0.247 NA 0.08 NA 0.059 NA Y N NA NA NA NA NA NA NA	0.966 NA 0.398 NA 0.154 NA N	NA N	NA NA NA NA NA NA NA NA	0.394 0.532 0.489 0.511 0.373 0.332 N NA NA NA NA NA NA NA
## PRODUCTION C. C. C. C. C. C. C. C	IP100387144 TUBA6 IP100007752 TUBB4	EDAANNYAR GHYTEGAELVDSVLDVVRK	1 7	103	45 15 2 40 1			1.011 0.888 0.424 0.391 0.377 0.281 N NA NA NA NA NA NA NA	0.138 NA 0.326 NA 0.112 NA N NA NA NA NA NA NA NA	NA N	0.755 0.632 0.714 0.267 0.334 0.163 Y 1.461 NA 0.659 NA 0.845 NA N
## PRODUCTION OF THE PROPERTY			1 14	247	247 UNIPROT 40 1 292 PhosphoELM 65 24 10	1 1.981 NA 1.299 NA 1.574 NA 1 0.964 1.027 0.978 1.076 0.955 0.667		NA N	NA NA NA NA NA N	NA N	NA NA NA NA NA NA
## PRODUCTION OF THE PROPERTY	IP100022353 TYK2 TYK2 II IP100295549 ULK3 ULK3 II	LTADSSHYLCHEVAPPR KDQEGDSAAALSLYCK	1 8	433 348 350	58 24 5 37 1	8 1.155 1.252 0.894 1.05 0.627 0.939 1 NA NA NA NA NA NA NA	Y 0.906 0.873 0.835 0.799 0.861 0.459 Y N 0.351 NA 1.336 NA 0.551 NA N	1.244 1.135 0.941 1.081 0.798 0.747 Y NA NA NA NA NA NA NA NA		NA N	
## PRODUZION 15T 15T 42		REPREDITE THE CONTROL OF T	1 8		16 19 2 165 UNIPROT 34 23 17	5 1.137 1.11 1.204 0.932 0.632 0.309 8 1.216 1.048 1.049 0.886 0.624 0.373	Y 0.849 1.059 0.831 0.854 0.403 0.396 Y Y 0.845 0.881 0.596 0.587 0.349 0.28 Y	0.688 0.968 0.959 0.841 0.536 0.335 Y 1.26 0.783 1.027 0.791 0.57 0.307 Y	1.632 0.729 1.417 0.773 0.709 0.427 Y 0.872 0.637 0.986 0.791 0.516 0.347 Y	NA N	NA 0.771 NA 0.756 NA 0.838 N 1.073 0.895 1.275 1.065 0.777 0.619 Y
## PRODUZION 15T 15T 42	#100025830 WEE1 Wee1 1	DYAMPTITUDOPSPAR TYWNDSCGEDMEASDYELEDETRPAKR VYNDSSCGEDMEASDYELEDETRPAKR	1 13	2621270	78 5	7 NA NA NA NA NA NA NA		3.963 NA 2.292 NA 0.879 NA N	1.253 0.951 1.246 1.329 0.846 0.733 N	NA NA NA NA NA NA NA	1.901 NA 1.592 NA 0.767 NA N
PRODUZENSE ZAY ZAY SSSPTOTICE 1 10335 - EXCREMENTE ST LOWPROT 32 1 40 1230 1330 1237 137 0001 0278 Y 1.239 1.132 0326 0.899 0.41 0.3 N 1.0			1 17	42	60 21 4	4 1.180 0.86 1.022 0.216 0.508 0.066	N 0.161 0.197 0.071 0.188 0.04 0.139 Y	0.687 0.224 0.3 0.145 0.174 0.089 Y	0.003 0.191 0.156 0.356 0.064 0.077 N	NA NA NA NA NA NA	1.806 0.866 1.179 1.592 2.77 1.156 Y
			1 139	591(593(599 635(639)637(63	48 4 77 22 3 837 INIPROT 38 21	1 1.116 1.076 1.31 0.781 0.357 0.155	N 0.755 0.862 0.964 0.616 0.216 0.249 Y	0.972 0.527 0.735 0.979 0.438 0.114 N	1.563 0.704 1.136 0.754 0.862 0.127 Y	NA N	1.100 NA 0.897 NA 1.358 NA N 2.15 1.124 2.055 1.188 1.396 0.826 N 1.007 1.001 1.00 1.28 1.008 0.899
900000000000 \$450 Prospectation 21 S 7 NA 1561 NA 1813 NA 6375 N NA N	IP100029400 ZNF265 8	ENVEYIEREESDGEYDEFGR	1 5 11 15	114 120 124	120 UNIPROT 32 1			0.643 NA 0.27 NA 0.036 NA N	NA NA NA NA NA N	NA NA NA NA NA N	
	IP100026262 RASGAP1 E	ENNTIR	1 3	460	460 PhosphoELM 21 5	7 NA 1.561 NA 1.613 NA 0.573	N NA NA NA NA NA N	NA NA NA NA NA N	NA NA NA NA NA N	NA NA NA NA NA N	0.81 0.639 0.949 0.986 0.67 0.201 Y

			_			D 01:			0.7
Protein	Drug added to lysate or	Bosu- tinib	Dasa- tinib	Ima- tinib	Sequence	P-Site		[drug] inducing half maximal binding competition of protein	References (PMID) and comment
	cells in	(B)	(D)	(I)			P-peptide (uM)	(uM)	
	culture	. ,	` ,	.,				, ,	
							Sites on tyrosine	kinases	
CSK	lysate	В			VMEGTVAAQDEFYR	Y184	0.32	0.71	PMID 9148770: Site is located in the probably flexible 'hinge region' between the SH2 and TK
	cells lysate	В	D		VMEGTVAAQDEFYR VMEGTVAAQDEFYR		<0.01 0.03	0.12 0.10	domains. Main site in HeLa cells. Induced by vanadate treatment. Likely not due to autophosphorylation. Does not affect kinase activity in vitro.
	cells		D		VMEGTVAAQDEFYR		<0.01	0.04	autophosphorylation. Does not affect kinase activity in vitto.
	lysate cells			- !	VMEGTVAAQDEFYR VMEGTVAAQDEFYR		0.07	>10 >5	
JAK2	lysate	В			EVGDYGQLHETEVLLK	Y570	>5 0.96	>5 >10*	PMID 16464493: Activating site, found in AML
	cells	В			EVGDYGQLHETEVLLK		0.04	N.D.	-
FAK/PTK2	lysate cells	B B			YMEDSTYYK YMEDSTYYK	Y576/577	0.40 0.06	1.10 0.57	PMID:14656986: Src phosphorylation sites , lead to activation of kinase
	lysate		D		YMEDSTYYK		0.13	>10	
	cells		D		YMEDSTYYK		0.07	>5	
	lysate	В			YMEDSTYYKASK	Y576 and Y577	0.20	1.10	PMID:14656986: Src phosphorylation sites , lead to activation of kinase
	cells	В			YMEDSTYYKASK	13//	<0.01	0.57	
	lysate cells		D D		YMEDSTYYKASK YMEDSTYYKASK		0.03 <0.01	>10 >5	
FER	lysate	В	U		EPPPVVNYEEDAR	Y402	0.74	1.90	novel
I	cells	В			EPPPVVNYEEDAR		0.12	0.39	
	lysate cells	B B			QEDGGVYSSSGLK QEDGGVYSSSGLK	Y714	1.00 0.02	1.90 0.39	PMID: 10998246
PYK2	lysate	В			YIEDEDYYKASVTR	Y579	2.00	1.30	PMID 15070849: Leads to activation of kinase
	cells	В			YIEDED Y YKASVTR		<0.01	0.98	
TEC	lysate cells	B B			YVLDDQ Y TSSSGAK YVLDDQ Y TSSSGAK	Y519	0.54 <0.01	0.57 0.01	unpublished site
	lysate		D		YVLDDQ Y TSSSGAK		0.03	0.06	
	cells		D		YVLDDQYTSSSGAK		<0.01	0.01	
							Sites on serine / three	onine kinases	
BRAF	lysate	B B			RDSSDDWEIPDGQITVGQR RDSSDDWEIPDGQITVGQR	S446/S447	>10 0.03	N.D.	PMID 15710605: constitutive phosphorylation of Ser445 primes B-Raf for activation, oncogenic
MAPK1	lysate	В			VADPDHDHTGFLTEYVATR	T184 and	>10		mutations within this region to block autoinhibition PMID 9677429: MEK site in T-loop, regulating ERK2 activity.
WAFKI	cells	В			VADPDHDHTGFLTEYVATR	Y186	0.01	>5	PINID 9077429. INCR Site III 1400p, regulating ERRZ activity.
	lysate		D		VADPDHDHTGFLTEYVATR		>10	>10	
	cells		D		VADPDHDHTGFLTEYVATR		<0.01	>5	
	lysate cells			1	VADPDHDHTGFLTEYVATR VADPDHDHTGFLTEYVATR		>10 0.33	>10 >5	
RPS6KA3 (RSK2)	lysate	B		- 1	DSPGIPPSANAHOLER	S369	0.33		PMID 15345747: Phosphorylation of the linker region by ERK1/2 activates RSKs
KF 30KA3 (K3K2)	cells	В			DSPGIPPSANAHQLFR	3309	0.04	0.12	PMID 1554747. Phospholylation of the linker region by ERR 1/2 activates RSRs PMID 15657420, 10980595: Activating MAP kinase site. p90 ribosomal S6 kinase is recruited to
									the nucleus upon activation.
	lysate cells		D D		DSPGIPPSANAHQLFR DSPGIPPSANAHQLFR		0.20 <0.01	>10 >5	
	lysate			- 1	DSPGIPPSANAHQLFR		>10	>10	
RPS6KA1 (RSK3)	cells lysate	В		- 1	DSPGIPPSANAHQLFR GFSFVATGLMEDDGKPR	S389	0.36 >10	>5 >10	
KF SUKKT (KSKS)	cells	В			GFSFVATGLMEDDGKPR	3309	0.03	>5	PMID 15345747: Site found in mouse brain. Possible autophosphorylation
	lysate		D D		GFSFVATGLMEDDGKPR GFSFVATGLMEDDGKPR		>10 <0.01		PMID 15345747: Phosphorylation of the linker region by ERK1/2 activates RSKs
	lysate		U	1	GFSFVATGLMEDDGKPR		>10	>5 >10	PMID 15657420, 10980595: Activating MAP kinase site. p90 ribosomal S6 kinase is recruited to the nucleus upon activation.
	cells	-		- 1	GFSFVATGLMEDDGKPR	2070	0.23	>5	·
	lysate cells	B B			TPKDSPGIPPSAGAHQLFR TPKDSPGIPPSAGAHQLFR	S372	>10 0.02	>10 >5	
	lysate		D		TPKDSPGIPPSAGAHQLFR		>10	>10	
	cells lysate		D		TPKDSPGIPPSAGAHQLFR TPKDSPGIPPSAGAHQLFR		<0.01 >10	>5 >10	
	cells			i	TPKDSPGIPPSAGAHQLFR		0.30	>5	
MAP3K4	lysate cells		D D		QTSRTDCPADR QTSRTDCPADR	T213/S214/ T216	0.25 <0.01	1.90 0.83	
	JUNIO				Q.O. IDOI ADI	1210	Sites on adaptor		
DOK1	lysate				ADSHEGEVAEGK	S269	N.D.	N.D.	Downstream of a S/T kinase regulated by one of the imatinib targets
551(1	cells			i	ADSHEGEVAEGK		62% decrease at 1 μM	>10	PMID 16094384
	lysate cells			1	KKPLYWDLYEHAQQQLLK KKPLYWDLYEHAQQQLLK	Y337/Y341	>10	N.D. >10	Likely substrate of Abl
ĺ	lysate	В			SHNSALYSQVQK	Y449	64% decrease at 1 μM 0.60	N.D.	PMID 16497976: Y337/Y341 are likely Abl sites. Likely substrate of Abl
ĺ	cells	В	_		SHNSALYSQVQK		<0.01		PMID 16497976, 16094384, 15659558, 15592455, 12522270: Y449 is a likely Abl site
	lysate cells		D D	1	SHNSALYSQVQK SHNSALYSQVQK		0.10 <0.01	N.D. N.D.	
	lysate			I	SHNSALYSQVQK		>10	N.D.	
	cells				SHNSALYSQVQK		50% decrease at 1 μM	>10	
						1 10	Sites on protein pho	•	
BDP1/PTPN18	lysate cells	B B			ENCAPLYDDALFLR ENCAPLYDDALFLR	Y314	0.90 0.01	N.D. 0.05	PMID 15951569: EGF-induced site of unknown function on a non-receptor protein tyrosine phosphatase
	lysate	В			SAEEAPLYSKVTPR	Y389	1.20	N.D.	prioopridiado
	cells lysate	В	D		SAEEAPLYSKVTPR SAEEAPLYSKVTPR		<0.01 0.16	0.05 N.D.	
	cells	L	D	L	SAEEAPLYSKVTPR		<0.01	N.D. N.D.	

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Layout of quantitative Kinobeads experiments. L1/L2/L3 refer to <u>lysate</u> competition experiments, C1/C2/C3 refer to experiments where compounds were applied to living <u>cells</u> in culture. The IMAC column indicates whether or not phospho-peptide enrichment was performed.

			iTRAQ label				
Compound	Experiment	IMAC	114	115	116	117	
			Con	npound con	centration	[µM]	
Imatinib	L1	YES	1	0.1	0.01	0	
Imatinib	L2	YES	10	0.3	0.03	0	
Dasatinib	L1	NO	0.01	0.001	0.00001	0	
Dasatinib	L2	YES	1	0.1	0.01	0	
Dasatinib	L3	YES	10	0.3	0.03	0	
Bosutinib	L1	NO	0.01	0.001	0.00001	0	
Bosutinib	L2	YES	1	0.1	0.01	0	
Bosutinib	L3	YES	10	0.3	0.03	0	
Imatinib	C1	YES	1	0.1	0.01	0	
Imatinib	C2	YES	5	0.3	0.03	0	
Dasatinib	C1	NO	0.01	0.001	0.00001	0	
Dasatinib	C2	YES	1	0.1	0.01	0	
Dasatinib	C3	YES	5	0.3	0.03	0	
Bosutinib	C1	NO	0.01	0.001	0.00001	0	
Bosutinib	C2	YES	1	0.1	0.01	0	
Bosutinib	C3	YES	5	0.3	0.03	0	

Bantscheff et al., Supplementary Table 9 online

Overview of individual experiments performed in this study.

The experiment ID column may be used to reference spectra to experiments in ${\bf Supplementary\ Tables\ 10}$ and ${\bf 11}$

EXPERIMENT_ID	Cell Line	Affinity matrix	'Free' compound profiled	application of 'free' compound to
1	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA
2	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA
3	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA
4	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA
5	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA
6	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA
7	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA
8	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA
9	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA
10	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA
11	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA
12	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA
13	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA
14	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA
15	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA
16	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA
17	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA
18	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA
19	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA
20	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA
21	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA
22	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA
23	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA
24	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA
25	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA
26	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA
27	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA
28	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA
29	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA NA
30	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA NA
31	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA NA
32	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA NA
33	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA NA
34	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA NA
35	HeLa	Bis-indolyl maleimide III	none (pulldown only)	
36 37	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA NA
38	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA NA
39	HeLa HeLa	Bis-indolyl maleimide III	none (pulldown only) none (pulldown only)	NA NA
40	HeLa	Bis-indolyl maleimide III Bis-indolyl maleimide III	none (pulldown only)	NA NA
41	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA NA
42	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA NA
43	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA NA
43	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA NA
45	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA NA
46	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA
47	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA NA
48	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA NA
49	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA NA
50	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA
51	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA NA
52	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA NA
53	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA NA
54	HeLa	Bis-indolyl maleimide III	none (pulldown only)	NA NA
55	K562	Bis-indolyl maleimide III	none (pulldown only)	NA NA
56	K562	Bis-indolyl maleimide III	none (pulldown only)	NA NA
57	HeLa	CZC8004	none (pulldown only)	NA NA

EXPERIMENT_ID	Cell Line	Affinity matrix	'Free' compound profiled	application of 'free' compound to
58	HeLa	CZC8004	none (pulldown only)	NA
59	HeLa	CZC8004	none (pulldown only)	NA
60	HeLa	CZC8004	none (pulldown only)	NA
61	HeLa	CZC8004	none (pulldown only)	NA
62	HeLa	CZC8004	none (pulldown only)	NA
63	K562	CZC8004	none (pulldown only)	NA
64	HeLa	Gefitinib analogue	none (pulldown only)	NA
65	K562	Gefitinib analogue	none (pulldown only)	NA
66	K562	Gefitinib analogue	none (pulldown only)	NA
67	HeLa	Imatinib analogue	none (pulldown only)	NA
68	HeLa	Imatinib analogue	none (pulldown only)	NA
69	HeLa	Imatinib analogue	none (pulldown only)	NA
70	K562	Imatinib analogue	none (pulldown only)	NA
71	K562	Imatinib analogue	none (pulldown only)	NA
72	K562	Imatinib analogue	none (pulldown only)	NA NA
73	K562	Imatinib analogue	none (pulldown only)	NA NA
74	HeLa	Lapatinib analogue	none (pulldown only)	NA
75	HeLa	Lapatinib analogue	none (pulldown only)	NA
76	HeLa	Lapatinib analogue	none (pulldown only)	NA NA
77	HeLa	PD173955 analogue	none (pulldown only)	NA NA
78	K562	PD173955 analogue	none (pulldown only)	NA NA
79	K562	PD173955 analogue	none (pulldown only)	NA NA
80	K562	PD173955 analogue	none (pulldown only)	NA
81	HeLa	Pelitinib analogue	none (pulldown only)	NA NA
82	HeLa	Pelitinib analogue	none (pulldown only)	NA NA
83	HeLa	Purvalanol B	none (pulldown only)	NA NA
84	HeLa	Purvalanol B	none (pulldown only)	NA NA
85	HeLa	Purvalanol B	none (pulldown only)	NA NA
86	HeLa	Purvalanol B	none (pulldown only)	NA NA
87	HeLa	Purvalanol B	none (pulldown only)	NA NA
88 89	HeLa HeLa	Purvalanol B Purvalanol B	none (pulldown only) none (pulldown only)	NA NA
90	HeLa HeLa	Purvalanol B	none (pulldown only)	NA NA
91	HeLa	Purvalanol B	none (pulldown only)	NA NA
92	HeLa	Purvalanol B	none (pulldown only)	NA NA
93	HeLa	Purvalanol B	none (pulldown only)	NA NA
94	HeLa	Purvalanol B	none (pulldown only)	NA NA
95	HeLa	Purvalanol B	none (pulldown only)	NA NA
96	HeLa	Purvalanol B	none (pulldown only)	NA NA
97	HeLa	Purvalanol B	none (pulldown only)	NA NA
98	HeLa	Purvalanol B	none (pulldown only)	NA NA
99	HeLa	Purvalanol B	none (pulldown only)	NA NA
100	HeLa	Purvalanol B	none (pulldown only)	NA
101	HeLa	Purvalanol B	none (pulldown only)	NA
102	HeLa	Purvalanol B	none (pulldown only)	NA
103	HeLa	Purvalanol B	none (pulldown only)	NA
104	HeLa	Purvalanol B	none (pulldown only)	NA
105	HeLa	Purvalanol B	none (pulldown only)	NA
106	HeLa	Purvalanol B	none (pulldown only)	NA
107	HeLa	Purvalanol B	none (pulldown only)	NA
108	HeLa	Purvalanol B	none (pulldown only)	NA
109	HeLa	Purvalanol B	none (pulldown only)	NA
110	HeLa	Purvalanol B	none (pulldown only)	NA
111	HeLa	Purvalanol B	none (pulldown only)	NA
112	HeLa	Purvalanol B	none (pulldown only)	NA
113	HeLa	Purvalanol B	none (pulldown only)	NA
114	HeLa	Purvalanol B	none (pulldown only)	NA
115	HeLa	Purvalanol B	none (pulldown only)	NA
116	HeLa	Purvalanol B	none (pulldown only)	NA
117	HeLa	Purvalanol B	none (pulldown only)	NA
118	HeLa	Purvalanol B	none (pulldown only)	NA
119	HeLa	Purvalanol B	none (pulldown only)	NA
120	HeLa	Purvalanol B	none (pulldown only)	NA
121	HeLa	Purvalanol B	none (pulldown only)	NA

EXPERIMENT_ID	Cell Line	Affinity matrix	'Free' compound profiled	application of 'free' compound to	
122	HeLa	Purvalanol B	none (pulldown only)	NA	
123	HeLa	Purvalanol B	none (pulldown only)	NA	
124	HeLa	Purvalanol B	none (pulldown only)	NA	
125	HeLa	Purvalanol B	none (pulldown only)	NA	
126	HeLa	Purvalanol B	none (pulldown only)	NA	
127	HeLa	Purvalanol B	none (pulldown only)	NA	
128	HeLa	Purvalanol B	none (pulldown only)	NA	
129	HeLa	Purvalanol B	none (pulldown only)	NA	
130	HeLa	Purvalanol B	none (pulldown only)	NA	
131	HeLa	Purvalanol B	none (pulldown only)	NA	
132	K562	Purvalanol B	none (pulldown only)	NA	
133	HeLa	Ro3201195 analogue	none (pulldown only)	NA	
134	HeLa	Ro3201195 analogue	none (pulldown only)	NA	
135	K562	Ro3201195 analogue	none (pulldown only)	NA	
136	HeLa	Staurosporine analogue	none (pulldown only)	NA	
137	HeLa	Staurosporine analogue	none (pulldown only)	NA NA	
138	HeLa	Staurosporine analogue	none (pulldown only)	NA NA	
139	HeLa	Staurosporine analogue	none (pulldown only)	NA NA	
140	HeLa	Vandetanib analogue	none (pulldown only)	NA NA	
141 142	HeLa	Vandetanib analogue	none (pulldown only)	NA NA	
142	Ramos Ramos	Kinobeads Kinobeads	none (pulldown only) none (pulldown only)	NA NA	
143	Ramos	Kinobeads	none (pulldown only)	NA NA	
145	Ramos	Kinobeads	none (pulldown only)	NA NA	
146	HeLa	Kinobeads	none (pulldown only)	NA NA	
147	Jurkat	Kinobeads	none (pulldown only)	NA NA	
148	K562	Kinobeads	none (pulldown only)	NA NA	
149	Placenta	Kinobeads	none (pulldown only)	NA NA	
150	K562	Kinobeads	Imatinib	living cells	
151	K562	Kinobeads	Imatinib	living cells	
152	K562	Kinobeads	Imatinib	living cells	
153	K562	Kinobeads	Imatinib	living cells	
154	K562	Kinobeads	Dasatinib	living cells	
155	K562	Kinobeads	Dasatinib	living cells	
156	K562	Kinobeads	Dasatinib	living cells	
157	K562	Kinobeads	Dasatinib	living cells	
158	K562	Kinobeads	Dasatinib	living cells	
159	K562	Kinobeads	Dasatinib	living cells	
160	K562	Kinobeads	Bosutinib	living cells	
161	K562	Kinobeads	Bosutinib	living cells	
162	K562	Kinobeads	Bosutinib	living cells	
163	K562	Kinobeads	Bosutinib	living cells	
164	K562	Kinobeads	Bosutinib	living cells	
165	K562	Kinobeads	Bosutinib	living cells	
166	K562	Kinobeads	Imatinib	lysate	
167	K562	Kinobeads	Imatinib	lysate	
168	K562	Kinobeads	Imatinib	lysate	
169	K562	Kinobeads	Imatinib	lysate	
170 171	K562 K562	Kinobeads	Dasatinib	lysate	
171	K562 K562	Kinobeads	Dasatinib Dasatinib	lysate	
173	K562	Kinobeads Kinobeads	Dasatinib Dasatinib	lysate lysate	
173	K562	Kinobeads	Dasatinib	lysate	
175	K562	Kinobeads	Dasatinib	lysate	
176	K562	Kinobeads	Bosutinib	lysate	
177	K562	Kinobeads	Bosutinib	lysate	
178	K562	Kinobeads	Bosutinib	lysate	
	K562	Kinobeads	Bosutinib	lysate	
1/9			_ DOGGETTID	1,0010	
179 180	K562	Kinobeads	Bosutinib	lysate	

A quantitative chemical proteomics approach reveals novel modes of action of clinical ABL kinase inhibitors

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Preparation of Kinobeads

Broad spectrum capturing ligands were immobilized on Sepharose beads through covalent linkage using amino and carboxyl groups. Compounds that do not contain a suitable functional group were modified in order to introduce such a group (see **Supplementary Table 1**). Details of ligand syntheses are reported elsewhere¹. For the immobilization via amino groups, 1 mL of NHS-activated Sepharose (Amersham) was equilibrated in DMSO and the ligand (0.1 µmol/mL of beads in DMSO) and 15 µL of triethylamine were added and the reaction allowed to proceed on an end-over-end shaker for 16 hours. The coupling reaction was monitored by HPLC. Free NHS-groups were blocked with aminoethanol and washed beads were stored in isopropanol at -20°C. For the immobilization of compounds via carboxyl groups, NHS-activated Sepharose 4 equilibrated in DMSO is added to a 4:4:1 mixture of aminoethanol, triethtylamine and ethylenediamine and the reaction was allowed to proceed for 16 hours on a shaker. After the reaction, the beads were washed with DMSO, and equilibrated in DMF. 100 µL of diisopropylethylamine and the ligand (0.1 µmol/mL of beads) were added, followed by 100 иL of 100 mM solution of bromo-tris-pyrrolidino-phosphonium a

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hexafluorophosphate in DMF. After incubation over night on a shaker, the beads were blocked by 100 μ L of 100 mM NHS-acetate as blocking reagent for 16 hours. Coupling was monitored by HPLC. Beads were washed in DMSO and stored in isopropanol and stored at -20°C.

Kinobeads competition binding assay

Cells were harvested by centrifugation and homogenized in lysis buffer (50 mM Tris/HCl pH 7.5, 5% glycerol, 1.5 mM MgCl₂, 150 mM NaCl, 20 mM NaF, 1 mM Na₃VO₄, 1 mM DTT, 5 μM Calyculin A, 0.8 % Igepal-CA630, and a protease inhibitor cocktail) using a Dounce homogenizer on ice. Lysates were cleared by centrifugation at 50,000 g for 30 min. at 4°C, and adjusted to 5 mg/mL total protein concentration using the Bradford assay. Compounds were dissolved in DMSO and added to 1 mL lysate samples, and 35 μL of a kinobeads suspension was added and agitated for 30 minutes at 4°C. This results in sufficient material for at least 10 LC-MS/MS samples for protein identification analysis, and in addition duplicate IMAC phospho-peptide samples (see below). For profiling of signaling pathways, compounds were added to 10⁸ K562 cells per data point, grown at 10⁶ cells/mL in RPMI/10% FCS.

After the incubation step, the beads were collected by centrifugation in a benchtop centrifuge for 1 minute at 800 rpm at 4°C, and washed once with 1 mL of ice-cold buffer (50 mM Tris/HCl pH 7.5, 5% (v/v) glycerol, 1.5 mM MgCl₂, 150 mM NaCl, 20 mM NaF, 1 mM DTT, 0.4 % Igepal-CA630). Beads were eluted with NuPAGE LDS buffer (Invitrogen), eluates were reduced, alkylated, separated on 4–12% NuPAGE gels (Invitrogen), and stained with colloidal Coomassie blue.

iTRAQ labeling of peptides

For quantitative experiments, reduced and carbamidomethylated kinobead eluates were concentrated on 4–12% NuPAGE gels (Invitrogen) by running sample approximately 1 cm into the gel. After staining with colloidal Coomassie, gels were cut into three slices

and subjected to in-gel digestion as described². Subsequently, peptide extracts were labeled with iTRAQTM reagents (Applied Biosystems) by adding 10 μL reagent in ethanol and incubation for 1 hr at 20°C in 60% ethanol, 40 mM triethylammoniumbicarbonate (TEAB), pH 8.5³. After quenching of the reaction with glycin all labeled extracts of one gel lane were combined and mixed with differently labeled extracts from other competition experiments according to **Supplementary Table 8**.

Enrichment of phospho-peptides by immobilized metal affinity chromatography

As indicated in **Supplementary Table 8**, selected samples were subjected to enrichment of phosphorylated peptides by immobilized metal affinity chromatography (IMAC; PhosSelect, Sigma) prior to mass spectrometric analysis as described⁴. LC-MS/MS for IMAC samples were performed twice.

LC-MS/MS analysis

IMAC-binding and non-binding fractions were collected separately, acidified and dried in vacuo. Samples were then re-suspended in 0.1 % formic acid in water (non-binding fraction) or 4 mM EDTA, 10 mM TEAB, pH 8.5 in water (phospho-peptide enriched fraction) and aliquots of the sample were injected into a nano-LC system (Eksigent 1D+) which was directly coupled to a LTQ-Orbitrap mass spectrometer (Thermo-Finnigan). Peptides were separated on a custom made 20 cm x 75uM (ID) reversed phase column (Reprosil). Gradient elution was performed from 2% acetonitrile to 40% acetonitrile in 0.1% formic acid within 4 hrs. The LTQ-Orbitrap was operated under the control of XCalibur Developers kit 2.0. Intact peptides were detected in the Orbitrap at 60.000 resolution. Internal calibration was performed using the ion signal from (Si(CH₃)₂O)₆H⁺ at m/z 445.120025⁵. Data dependent tandem mass spectra were generated for up to six peptide precursors in the linear ion trap using pulsed-Q dissociation (PQD) to enable detection of iTRAQ reporter ions⁶. For PQD, the Q-value was set to 0.55, activation time was set to 0.32 ms and collision energy of 26 was used. Up to 1E5 ions were accumulated in the ion trap within a maximum ion accumulation time of 1 sec and two spectra were

averaged per peptide precursor. Further details on PQD/iTRAQ procedures will be published elsewhere (Bantscheff *et al*, manuscript in preparation).

Peptide and protein identification

MascotTM 2.0 software (Matrix Science) was used for protein identification using 5 ppm mass tolerance for peptide precursors and 0.8 Da tolerance for fragment ions. Carbamidomethylation of cysteine residues and iTRAQ modification of lysine residues were set as fixed modifications and S,T,Y phosphorylation, methionine oxidation, N-terminal acetylation of proteins and iTRAQ modification of peptide N-termini were set as variable modifications. The search data base consisted of an in-house curated version of the IPI protein sequence database combined with a decoy version of this database⁷. The decoy data base was created using a script supplied by Matrix Science. The Mascot ion score threshold for this database was 38 (indicating <5% random spectrum to sequence assignments). Unless stated otherwise, we accepted protein identifications as follows:

- (i) for single spectrum to sequence assignments, we required this assignment to be the best match *and* a minimum Mascot score of 37 *and* a 10x difference of this assignment over the next best assignment. Based on these criteria, the decoy search results indicate <1% false positive identification rate;
- (ii) for multiple spectrum to sequence assignments and using the same parameters, the decoy search results indicate <0.1% false positive identification rate;
- (iii) for phospho-peptides <3% false positive identification rate was achieved either by a decoy analysis at a minimum Mascot score of 31 *or* by requiring the identification of a phospho-peptide in at least 12 of the 24 IMAC experiments (see section below).

Functional annotation

The functional annotation provided in **Table 1** and **Supplementary Table 3** was performed by matching each identified protein to the "Sugen" kinase list⁸, to Gene Ontology (GO) terms⁹ and to Interpro domains¹⁰.

Heat map generation

For generation of heat maps (**Figure 1**, **Supplementary Figure 1**), a semi-quantitative estimation of relative protein abundance was achieved using the total number of spectrum to sequence matches (SSMs) obtained for individual proteins in cell lines¹¹. The cell line for which the highest number of SSMs was obtained is indicated in dark blue. Lighter levels of blue indicate lower numbers of SSMs using a total of 15 levels of blue.

Peptide and protein quantification

Centroided iTRAQ reporter ion signals were computed by the XCalibur software operating the mass spectrometer and extracted from MS data files using in-house developed software. Only peptides unique for identified proteins were used for relative protein quantification. iTRAQ reporter ion intensities were multiplied with the ion accumulation time yielding an area value proportional to the number of reporter ions present in the ion trap. Fold changes are reported based on iTRAQ reporter ion areas in comparison to vehicle control and were calculated using a linear model. For quantification of phosphorylated peptides, only those were considered for which the sum of iTRAQ areas was greater than 100.000. For more details see the **Supplementary Data** online section.

Dose response binding curves and IC50 calculation

Dose-response curves were fitted using R (www.r-project.org)¹² and the drc package (www.bioassay.dk)¹³. For each protein, relative displacement values to the vehicle control were fitted to concentrations of compound using a 4-parameter, unconstrained log-logistic equation. In some cases, the upper limit had to be fixed to 1 (vehicle control) to allow proper fitting. Inflection point and IC50 (corresponding the 50% of the vehicle control) were reported for any protein that was displaced at least 40% compared to the vehicle control.

Quality control and robustness of kinobead profiling

Kinobeads were generated in batches from 1 mL up to 100 mL. Quality controls of different batches were performed by monitoring the coupling reaction by HPLC and by testing each batch in a compound competition binding assay where IC50 binding values for a number of kinases are generated using western blot-based quantification on a LICOR Odyssey instrument, as shown in **Figure 4a**. The observed reproducibility of the resulting IC50 values between batches is typically better than twofold. In six different experiments using different batches of cell lysate, different batches of kinobeads, and different mass spectrometers, IC50 binding values obtained were typically also within twofold. For instance, the IC50 binding values for imatinib to BCR-ABL and NQO2 in K562 lysate determined in these six independent experiments were 128 +/- 93 nM and 42 +/- 14 nM, respectively. These values show only slightly higher variability than the values determined using the same batch of kinobeads and lysate (see **Supplementary Fig. 3**). For the profiling experiments shown in **Figure 1** and **Figure 3**, one single batch of K562 cell lysate was used.

Biochemical kinase activity assays

Biochemical kinase activity assays were performed by the Invitrogen SelectScreen service, for the following kinases: BTK, EphB4, FAK/PTK2, FER, GCK, KHS1, KIT, MER, p38 α , and SYK. The concentration of ATP was selected to equal K_m , except for p38 α , where 100 μ M ATP was used. Inhibition data for DDR2 were generated by the Upstate IC₅₀Profiler ExpressTM service, using an ATP concentration of 200 μ M.

Inhibition data for DDR1 were generated in-house, using a purified recombinant fragment of human DDR1 containing the catalytic domain, purchased from Carna Biosciences. Inhibition was assayed in kinase buffer (20mM Tris pH 7.5, 2 mM MgCl₂, 2 mM MnCl₂, 0.1 mM Na₃VO₄, 0.05% Brij-35) supplemented with 10 μ M (γ –³²P)ATP (20 Ci/mmol) and 25 μ M IRS1 peptide-F (a generous gift of Dr. Takashi Hara, Carna Biosciences) following published procedures¹⁴. Inhibition of DDR1 was also assayed by autophosphorylation using (per data point) 100 ng DDR1 in kinase buffer supplemented

with 2 μ M (γ – 32 P)ATP (100 Ci/mmol). Radioactive phosphate incorporated in DDR1 was quantified by SDS-PAGE and autoradiography using a Typhoon 9200 (Amersham Biosciences).

Appendix: Factors influencing the competition binding assay

There are a number of variables which in theory should affect the degree of competition of a protein binding to the capturing ligands on the kinobeads: (1) the affinity of a given protein for the capturing ligand, (2) the concentration of the capturing ligand, (3) the expression level of the kinase, or more directly, the concentration of the kinase in the lysate, and (4) the concentration and affinity of the non-immobilized compound in competition with the capturing ligand. It is advantageous to minimize the impact of the first three factors, so that, under conditions of competition with 'free' compound, the determined IC50 competition values are close to 'true' dissociation constants, and are not influenced markedly by the other variables which tend to differ between individual kinases, ligands, and lysates. Therefore, we have selected conditions under which we do observe little (<10%) or no depletion of proteins from the lysate. This is achieved by (1) keeping the concentration of capturing ligands during the incubation at sub-micromolar levels, and (ii) by using a large access of lysate to become independent of expression levels. Under these conditions, the data obtained for all proteins in the same sample can be directly compared. A more quantitative discussion of these factors is given below, and can also be found in the literature 15, 16.

However, in some cases when one or more of the immobilized inhibitors exhibit very high affinity of for a given protein, the binding results for the non-immobilized test compounds binding to this protein could be skewed. The binding results would show a systematic shift towards higher IC50 values if the dissociation constant (Kd) of a given protein for the immobilized ligand would be substantially lower (by one or more orders of magnitude) than the concentration of the capturing ligand during the kinobeads binding step. In practical terms, this would be the case for proteins where the capturing ligand exhibits low nanomolar or even picomolar Kd values, which is not expected to be the case for the immobilized broad-selectivity ligands used in this study. Such very high affinity capturing ligands may lead to substantial depletion of binding proteins from the lysate. We have tested this for a number of kinases and in no case observed more than 10

% depletion (data not shown). However, it should be noted that the relative order of binding for a number of 'free' test compounds to such a protein would still be correct.

The above arguments can be derived from a set of binding equations. If a compound C binds to a protein P:

Equation 1
$$C + P \Leftrightarrow PC$$
,

the equilibrium is defined by:

Equation 2
$$K_D = \frac{[C] * [P]}{[PC]}$$
,

resulting in

Equation 3
$$\forall [C] = [C]_{1/2}, \\ [P] = [PC],$$

and

Equation 4
$$K_D = [C]_{1/2}$$
.

Upon the addition of a capturing ligand, this equilibrium is affected by a second process, namely, the binding of free protein to the immobilized ligand B:

Equation 5
$$B+P \Leftrightarrow PB$$

Note that in the following equations, this does not necessarily implicate that an equilibrium state is reached. *PB* could also be a function of time.

This reaction influences the half-binding concentration of C as follows:

Equation 6
$$\forall [C] = [C]_{1/2}, \\ [P] + [PB] = [PC].$$

Furthermore, the initial protein concentration P_0 is:

Equation 7
$$[P]_0 = [P] + [PC] + [PB] ,$$

Thus resulting in

$$[P]_0 = [P] + [P] + [PB] + [PB]$$
Equation 8
$$= 2[P] + 2[PB]$$

$$= 2[PC]$$

Therefore, the initial concentration of free compound is:

$$[C]_{1/2,0} = [C]_{1/2} + [PC]$$
Equation 9
$$= [C]_{1/2} + \frac{[P]_0}{2}$$

And using equation 6, equation 2 is transformed into:

$$\begin{bmatrix} C \end{bmatrix}_{1/2,0} = K_D * \frac{[PC]}{[P]} + \frac{[P]_0}{2}$$

$$= K_D + K_D * \frac{[PB]}{[P]} + \frac{[P]_0}{2}$$

Assuming that $B+P \Leftrightarrow PB$ are in equilibrium, this results in

Equation 11
$$\frac{\begin{bmatrix} B \end{bmatrix}}{K_{DB}} = \frac{\begin{bmatrix} PB \end{bmatrix}}{\begin{bmatrix} P \end{bmatrix}}.$$

Assuming that
$$\frac{[P]_0}{2} \ll K_D$$
,

Equations 10 and 11 can be combined, yielding:

Equation 12
$$[C]_{1/2,0} = K_D * (1 + \frac{[B]}{K_{DB}}) + \frac{[P]_0}{2}$$
.

However, in kinobeads competition experiments $B + P \Leftrightarrow PB$ are not necessarily in equilibrium. Hence, using equations 6-8, equation 2 can then be expressed as:

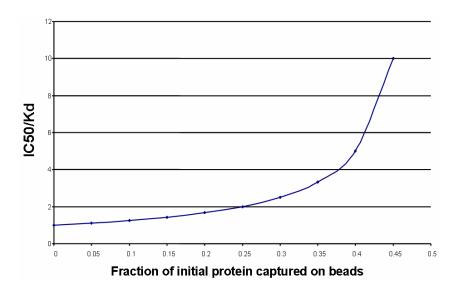
Equation 13
$$K_D = \frac{\left[C\right]_{1/2}*\left(\frac{\left[P\right]_0}{2} - \left[PB\right]\right)}{\frac{\left[P\right]_0}{2}} \; .$$

Or, using equation 9:

Equation 14
$$[C]_{1/2,0} = \frac{K_D}{1 - 2 \frac{[PB]}{[P]_0}} + \frac{[P]_0}{2} .$$

where PB is a function of time, until an equilibrium is reached.

Now, the influence of depletion (the fraction of a given protein bound to the capturing ligands) can be calculated. Based on equation 14, the graph below shows how the fraction of protein bound to the capturing ligand affects the deviation of the competition binding IC50 value from the Kd:



Thus, as long as the fraction of protein depleted is below 25%, the IC50 will be less than two times the Kd. As shown this is governed by an asymptotic function with a non-defined point at 50%. Thus, in regions > 40% depletion one is unlikely to measure any competition.

Since

Equation 15
$$\frac{d([PB])}{dt} = k_{on} * [P] * [B],$$

the rate of protein binding to the capturing ligands on the beads is a function of the capturing ligand concentration, the protein concentration and time. As noted, the influence of IC50/Kd can be minimized by using a low concentration of capturing ligands and/or a ligand with low affinity. As long as the initial protein concentration is below Kd, using a lower protein concentration is not favorable since in equation 14, the ratio of concentration of protein on beads to initial protein concentration is the relevant term.

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Supplementary Data

A quantitative chemical proteomics approach reveals novel modes of action of clinical ABL kinase inhibitors

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Details of peptide identifications

The individual experiments represented in **Figure 1** and **Supplementary Figure 1** online, and **Figure 3b** and **3c**, are listed in **Supplementary Table 9** online. In addition, the peptide identification data collected in each individual experiment are listed in **Supplementary Tables 10** (for **Fig. 1** and **Supplementary Fig. 1**) and **11** online (for **Fig. 3b** and **Fig. 3c**).

In **Supplementary Table 10** online, the total number of times a spectrum with the given peptide sequence was matched to a protein with the listed accession number is shown along with the maximum mascot ions score. 'Spectrum count' refers to the number of acquired MS/MS spectra matching to the peptide sequence given.

Supplementary Table 11 online contains all peptides obtained and quantified for the data in **Figures 3b** and **3c**. Only data from peptides matching unambiguously to a single protein were used in quantification. 'Intensity values' 114, 115, 116, 117 refer to the iTRAQ reporter ion intensities measured in MS/MS spectra. 'Area values' 114, 115, 116, 117 refer to the respective iTRAQ reporter ion intensities measured in MS/MS spectra multiplied with the ion accumulation time to generate a value that is proportional to the number of reporter ions present in the ion trap.

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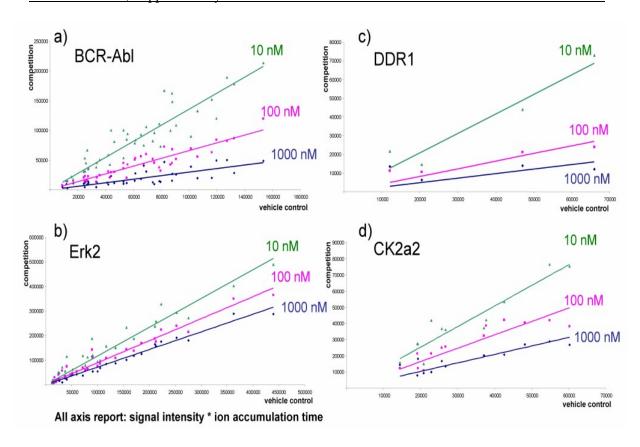
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Quantification of peptides and proteins

For protein quantification, we chose the approach illustrated in **Supplementary Figure 6**. Essentially it takes the form of: a) plotting the iTRAQ areas for each peptide of the three compound concentrations against the vehicle control in a 2D plot (intensity multiplied by the ion accumulation time to achieve a value directly proportional to the number of ions individual quantification values are based on) and then b) calculating the fold change using a two-sided linear regression analysis (to account for the fact that weak spectra may distort the true ratios). The slope of the trend line is a measure for the determined fold-change. Note that the slope of each trend line subsequently provides one data point for a dose response curve. Assembly of 6 point or 9 point dose response curves is achieved by performing 2 (3) separate iTRAQ experiments with one compound concentration in common which provides a means to normalize the 2 (3) separate data sets.



Supplementary Figure 6: Examples for linear regression analysis for four kinases identified and quantified in kinobeads competition experiments using imatinib. Diamonds, squares and triangles represent quantitative values for individual peptides at three different Imatinib concentrations. Trend lines indicate results of the two-sided linear regression analysis.

Validation of phospho-peptide identifications

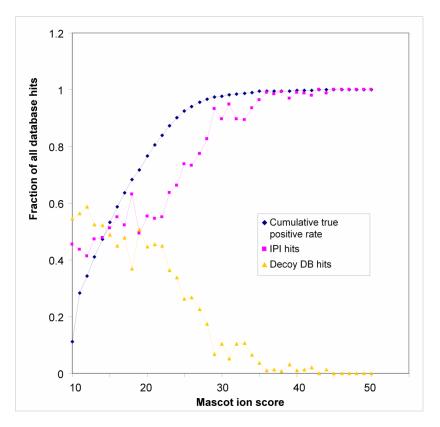
The data presented in this paper includes the identification of several hundred phosphorylated peptides. Because of the sheer number of spectra matching to phosphorylated peptides, manual verification proved to be impractical. Other than the spectra included at the end of this supplement, we have not manually verified the phosphorylation sites listed in **Supplementary Table 6**. As an alternative, we sought to estimate the accuracy of phospho-peptide identification by a combination of i) use of a combined IPI and decoy protein sequence database for peptide identification^{1, 2} and ii) replicate analysis of 24 kinobeads experiments for which we also enriched for phospho-

peptides using IMAC. The steps and results of the approach are detailed below. In summary, the phosphorylation data presented in this study conforms to a 97% identification confidence criterion which requires a Mascot ion score of at least 31 for any particular identification *OR* identification of any particular phospho-peptide in 12 out of 24 experiments.

Data preparation: The data from the IMAC analysis of kinobeads experiments was initially filtered to contain only those phosphorylated peptides (i.e. combinations of peptide sequence and modification assignments) that were assigned to proteins with a Mascot total score of >20. All other peptides/proteins were categorically rejected. In addition, for each spectrum, only the highest scoring protein match was considered (bold peptide definition of Mascot) and any combination of peptide sequence and modification had to represent the best spectrum to sequence match (rank1 definition of Mascot) in at least one of the 24 experiments. All other data not conforming to these criteria were removed. The remaining data constitutes more than 29.000 different combinations of protein accession number, peptide sequence and modification assignment. 14,300 of these were matched to IPI database entries and 12.700 to decoy data base entries indicating that at this stage, no confidence could be assigned to any particular phospho-peptide.

Confidence assignment using Mascot ion score: In a first step, we evaluated the influence of the Mascot ion score on the distribution of phospho-peptide assignments to the IPI and decoy database (Supplementary Figure 7). If a particular phospho-peptide assignment was found more than once, the highest Mascot ion score was used for this analysis. About one third of all phospho-peptide assignments had peptide ion scores of 10 or less and for those the number of matches to the decoy database exceeded that of the IPI data base, indicating that these assignments were not significant. As one might expect, the significance of phospho-peptide assignments increases strongly with increasing Mascot ion score and for Mascot ion scores of 45 and above, there were 1054 different

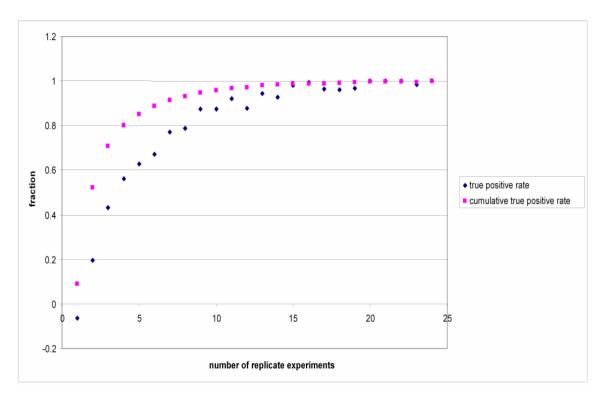
assignments in the IPI database but not a single match to the decoy data base. Given that the number of false positive assignments in the IPI database should be equal to that of the decoy data base, a true positive rate can be calculated for each Mascot ion score by subtracting the number of assignments to the decoy data base from the number of assignments to the IPI data base and dividing that by the number of assignments to the IPI data base. For the purpose of this study, we required a 97% confidence threshold for all reported phospho-peptides which was satisfied by Mascot ion scores of 29 or higher.



Supplementary Figure 7: True positive rate of phospho-peptide identification as a function of Mascot ion score.

Confidence assignment using replicate analysis: Second we investigated, if phosphopeptide assignments that were made repeatedly across the 24 individual IMAC experiments performed in this study provide higher confidence than those that were found only once. In fact, most phospho-peptide assignments were made only in one or

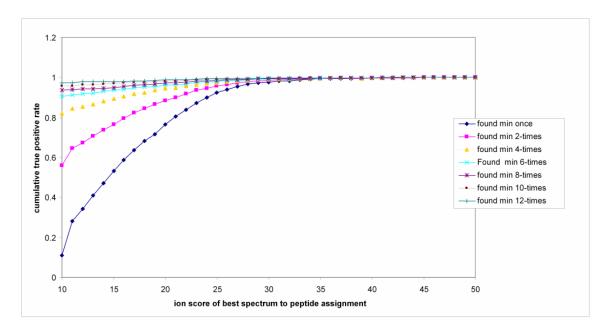
two experiments and the numbers of assignments to the IPI and decoy databases were similar indicating a low confidence level (data not shown). In contrast, the 182 phosphopeptide assignments present in all 24 experiments all matched to the IPI database and produced no hit in the decoy database indicating a very high level of confidence. A cumulative true positive rate of >97% was achieved for phospho-peptide when identified in at least 12 out of the 24 experiments (**Supplementary Figure 8**).



Supplementary Figure 8: True positive rate of phospho-peptide identification as a function of replicate analysis.

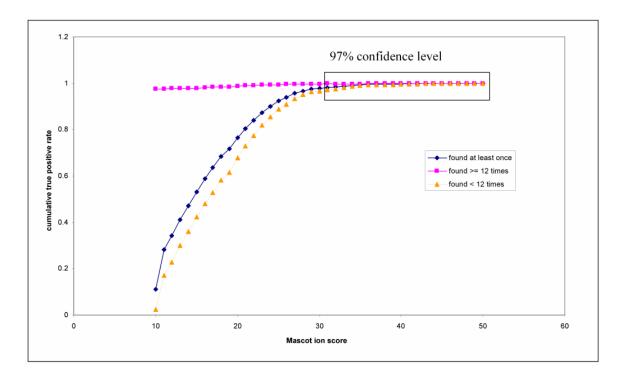
Combined phosphorylation confidence criterion: As shown above, Mascot ion score and reproducibility of identification both strongly discriminate against random phosphorylation assignments. We next analyzed how the two measures correlate. As can be seen in **Supplementary Figure 9**, the true positive rates based on Mascot ion scores are different for assignments made consistently compared to those found only sporadically and the dependency of true positive rate on Mascot peptide score decreases

drastically with the number of replicates in which a particular phospho-peptide was identified. To reach 97% confidence in phospho-peptide assignments, we selected all phospho-peptide assignments that were made in at least half of the 24 experiments.



Supplementary Figure 9: Cumulative true positive rate of phospho-peptide identification as a function of Mascot ion score and number of times a phospho-peptide has been identified in a set of 24 experiments.

These assignments where then subtracted from the data and the remaining data was again analyzed for the dependency of true positive assignments on the Mascot ion score (**Supplementary Figure 10**). According to this plot, an ion score of at least 31 is required to fulfill the >97% confidence level criterion. Taken together, the combined confidence criterion requires phospho-peptide assignments with a Mascot ion score of at least 31 OR identification in 12 out of 24 experiments. When applying this criterion to the data generated in this study, the net result comprises 482 distinct phosphorylation sites (**Supplementary Table 7**).



Supplementary Figure 10: Cumulative true positive rate of phospho-peptide identification as a function of Mascot ion score and number of times a phospho-peptide has been identified in a set of 24 experiments.

Phosphopeptide Spectra

In low energy CID (i.e. collision-induced dissociation e.g. in a linear ion trap) a peptide carrying a positive charge fragments mainly along its backbone, generating predominantly a, b and y ions. In addition, peaks are observed for ions which have lost ammonia (-17 Da) denoted a^* , b^* and y^* or water (-18 Da) denoted a° , b° and y° . For phosphorylated peptides the loss of phoshorous acid (-80 Da) and phosphoric acid (-98 Da) are frequently observed. The accepted nomenclature for fragment ions was first proposed by Roepstorff and Fohlman³ and subsequently modified by Johnson *et. al.* ⁴.

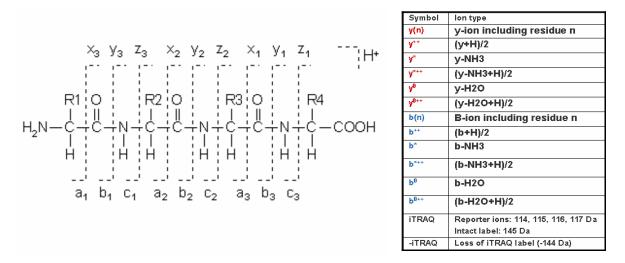


Figure S11: Phosphorylation annotation: Fragment ion nomenclature

Supplementary Figures S12-S32 show annotated spectra:

Figure S12: VMEGTVAAQDEFpYR
TYROSINE-PROTEIN KINASE CSK.

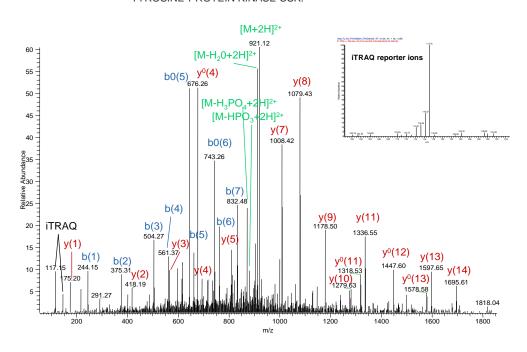


Figure S13: EVGDPYGQLHETEVLLK TYROSINE-PROTEIN KINASE JAK2

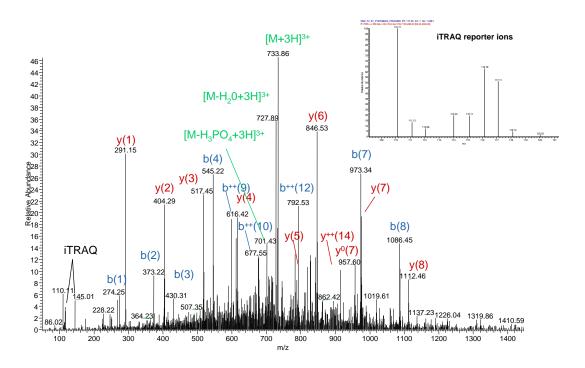


Figure S14: YMEDSTpYYK
SPLICE ISOFORM 1 OF FOCAL ADHESION KINASE 1

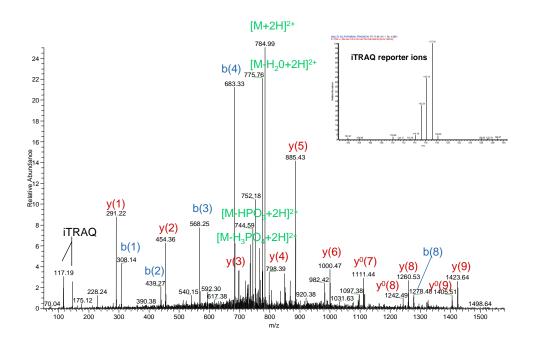


Figure S15: YMEDSTpYpYKASK

SPLICE ISOFORM 1 OF FOCAL ADHESION KINASE 1

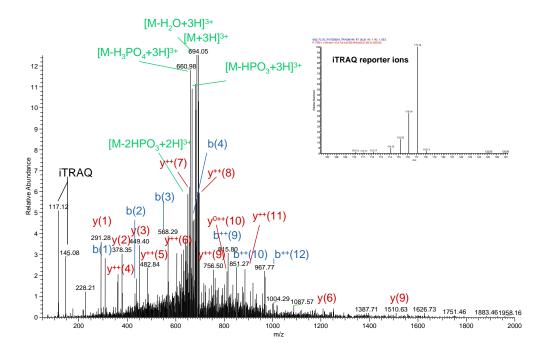


Figure S16: EPPPVVNpYEEDAR
PROTO-ONCOGENE TYROSINE-PROTEIN KINASE FER

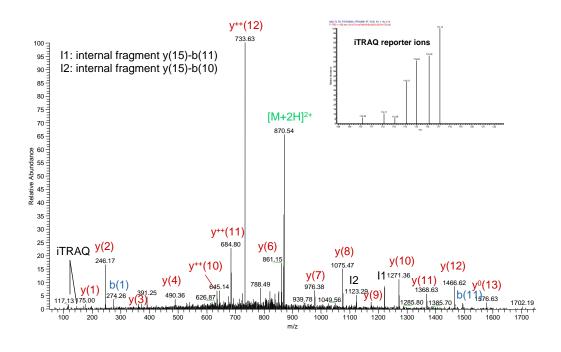


Figure S17: QEDGGVpYSSSGLK
PROTO-ONCOGENE TYROSINE-PROTEIN KINASE FER

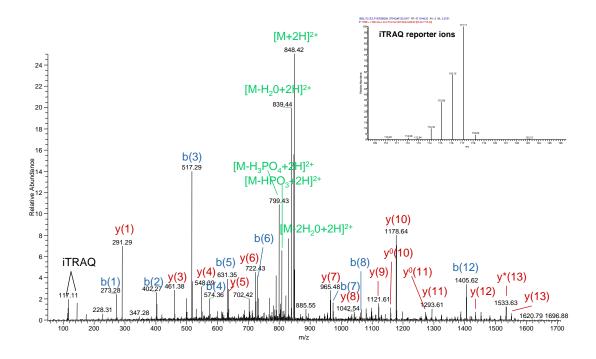


Figure S18: YIEDEDPYYKASVTR
SPLICE ISOFORM 1 OF PROTEIN TYROSINE KINASE 2 BETA

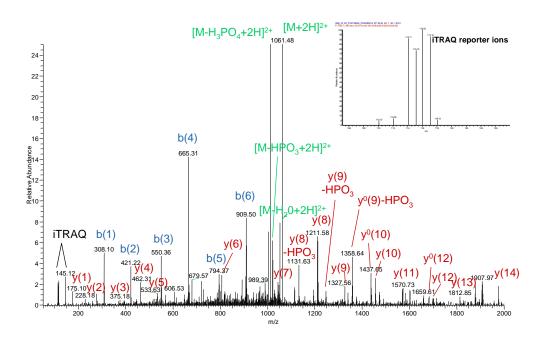


Figure S19: YVLDDQpYTSSSGAK
TYROSINE-PROTEIN KINASE TEC

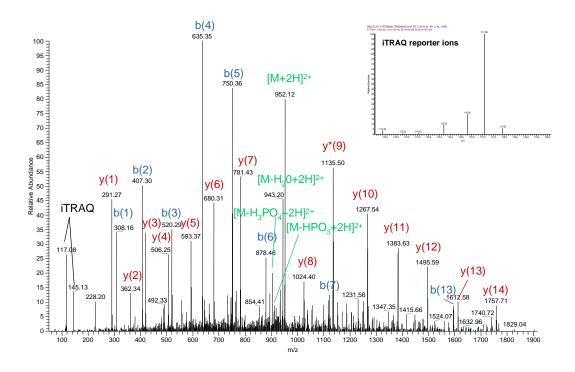


Figure S20: RDpSSDDWEIPDGQITVGQR
B-RAF PROTEIN

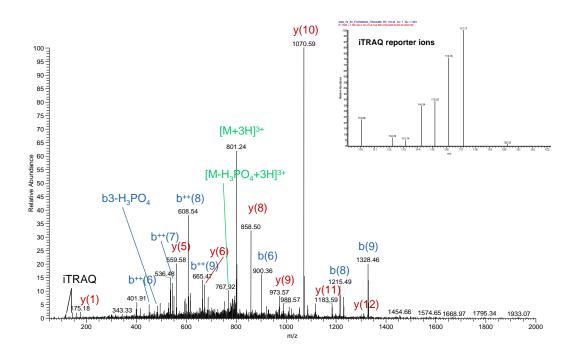


Figure S21: VADPDHDHpTGFLTEpYVATR MITOGEN-ACTIVATED PROTEIN KINASE 1

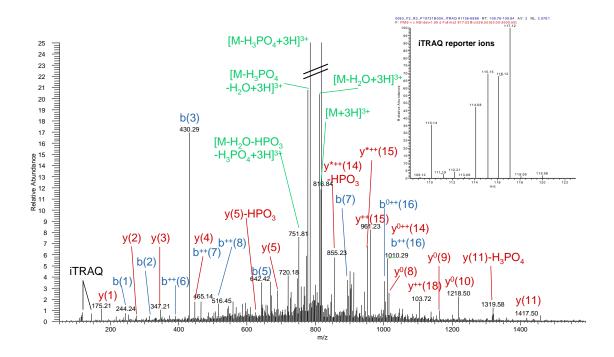


Figure S22: VADPDHDHTGFLTEpYVATR
MITOGEN-ACTIVATED PROTEIN KINASE 1

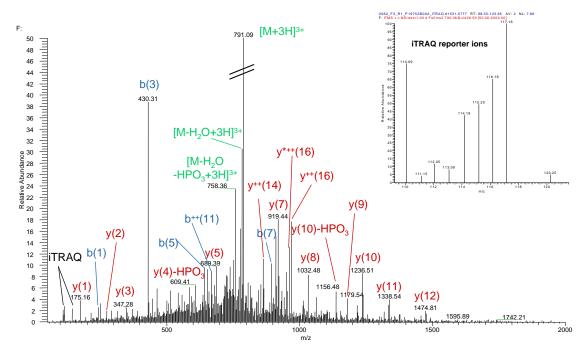


Figure S23: TPKDpSPGIPPSANAHQLFR RIBOSOMAL PROTEIN S6 KINASE ALPHA 3

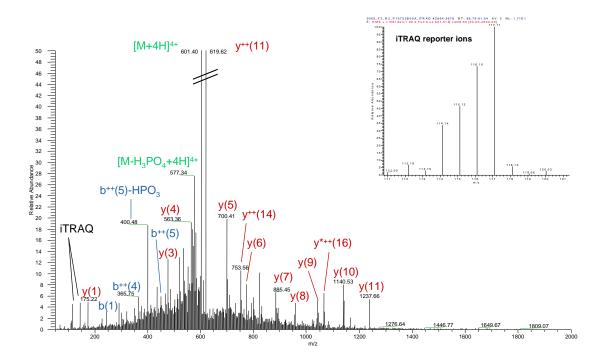


Figure S24: GFpSFVATGLMEDDGKPR
RIBOSOMAL PROTEIN S6 KINASE ALPHA 1

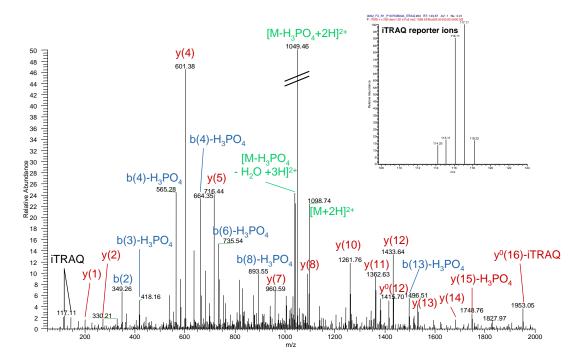


Figure S25: TPKDpSPGIPPSAGAHQLFR
RIBOSOMAL PROTEIN S6 KINASE ALPHA 1

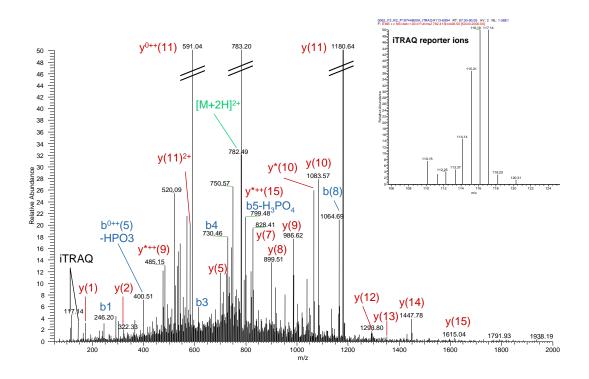


Figure S26: QTpSRTDCPADRLK
SPLICE ISOFORM A OF MITOGEN-ACTIVATED PROTEIN KINASE KINASE KINASE 4.

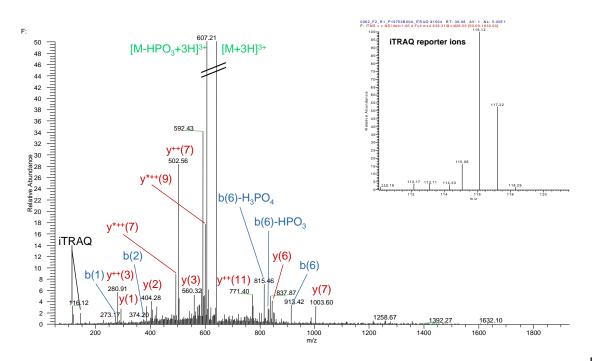


Figure S27: ADpSHEGEVAEGK SPLICE ISOFORM 1 OF DOCKING PROTEIN 1

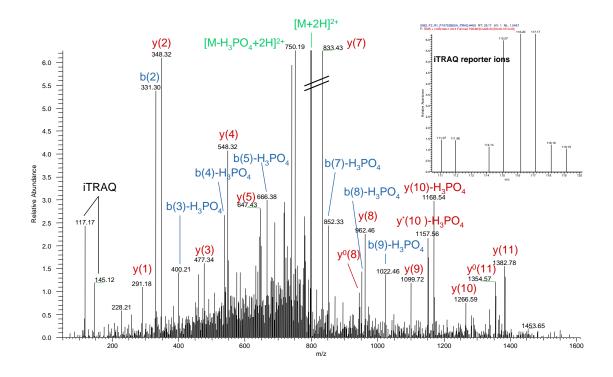


Figure S28: KKPLpYWDLYEHAQQQLLK
SPLICE ISOFORM 1 OF DOCKING PROTEIN 1

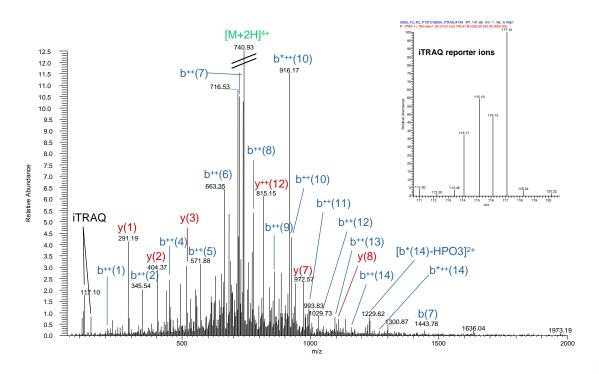


Figure S29: SHNSALpYSQVQK
SPLICE ISOFORM 1 OF DOCKING PROTEIN 1

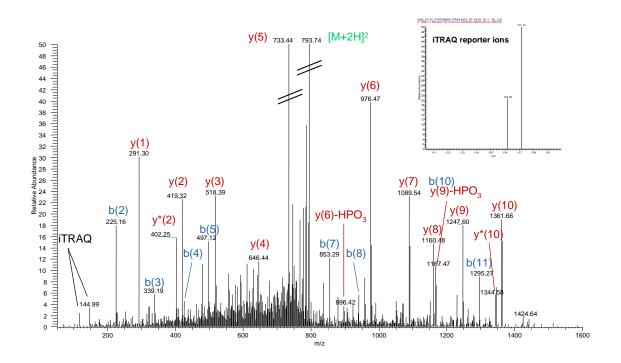


Figure S30: ENCAPLPYDDALFLR
PROTEIN-TYROSINE PHOSPHATASE, NON-RECEPTOR TYPE 18

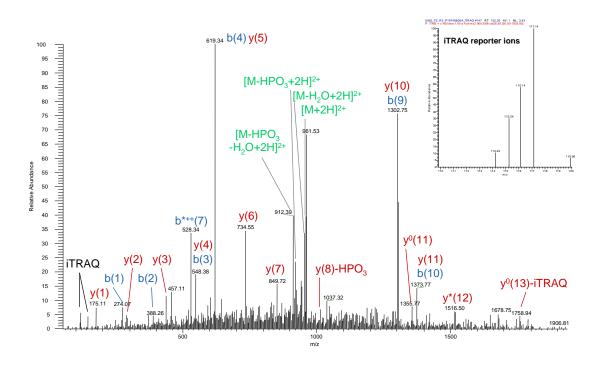


Figure S31: SAEEAPLPYSK
PROTEIN-TYROSINE PHOSPHATASE, NON-RECEPTOR TYPE 18

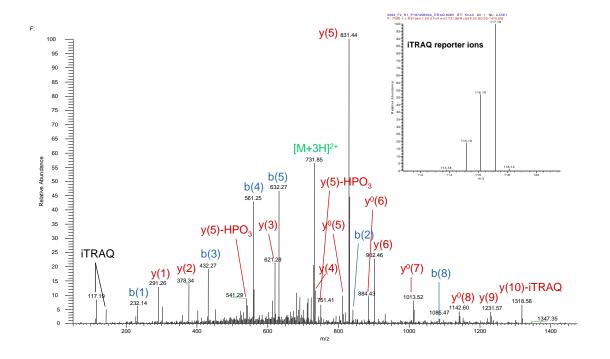
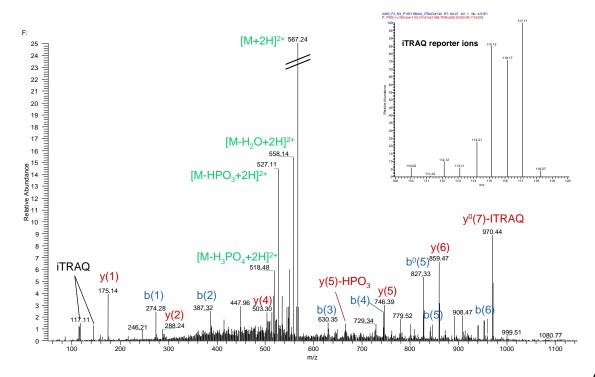


Figure S32: EIpYNTIR
SPLICE ISOFORM 1 OF P20936 RAS GTPASE-ACTIVATING PROTEIN 1.



References

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- 2. Elias, J.E. & Gygi, S.P. Target-decoy search strategy for increased confidence in large-scale protein identifications by mass spectrometry. *Nat. Methods* **4**, 207-214 (2007).
- 3. Roepstorff, P. & Fohlman, J. Proposal for a common nomenclature for sequence ions in mass spectra of peptides. *Biomed. Mass Spectrom.* **11**, 601 (1984).
- 4. Johnson, R.S., Martin, S.A., Biemann, K., Stults, J.T., & Watson, J.T. Novel fragmentation process of peptides by collision-induced decomposition in a tandem mass spectrometer: differentiation of leucine and isoleucine. *Anal. Chem.* **59**, 2621-2625 (1987).