

# CDKN1B

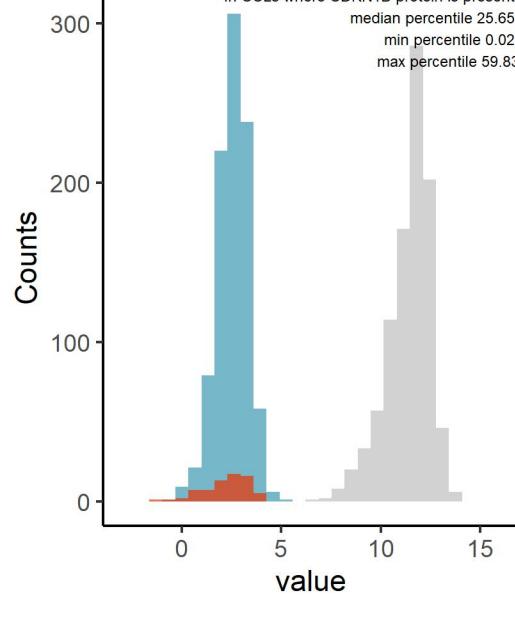
Protein name: CDKN1B ; UNIPROT: P46527 ; Gene name: cyclin dependent kinase inhibitor 1B

Ligandable: NA ; Ligandable\_by\_Chem: NA ; Is\_enzyme: NA (<https://cansar.ai/>)

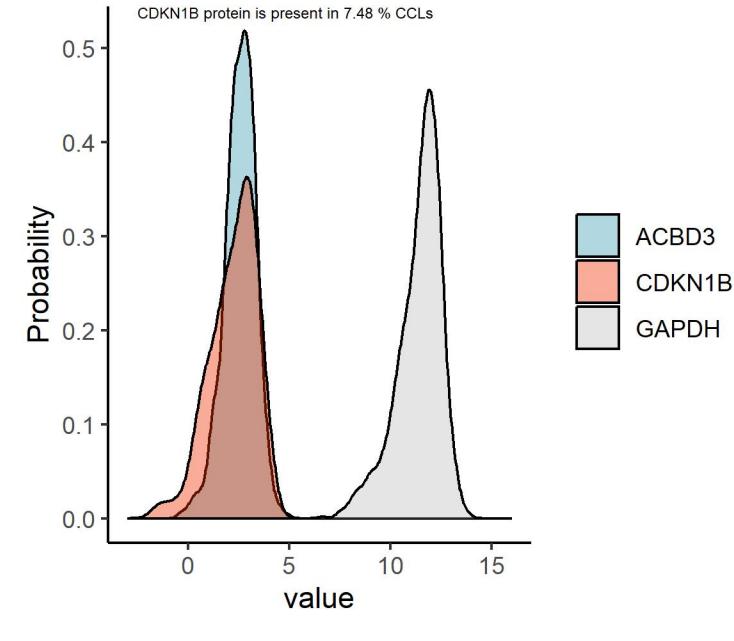
## Sanger Institute Protein Database 2 (DB2), protein presence is less certain

8498 proteins in same 949 CCLs

Histogram of CDKN1B protein compared to proteins with low and high abundance

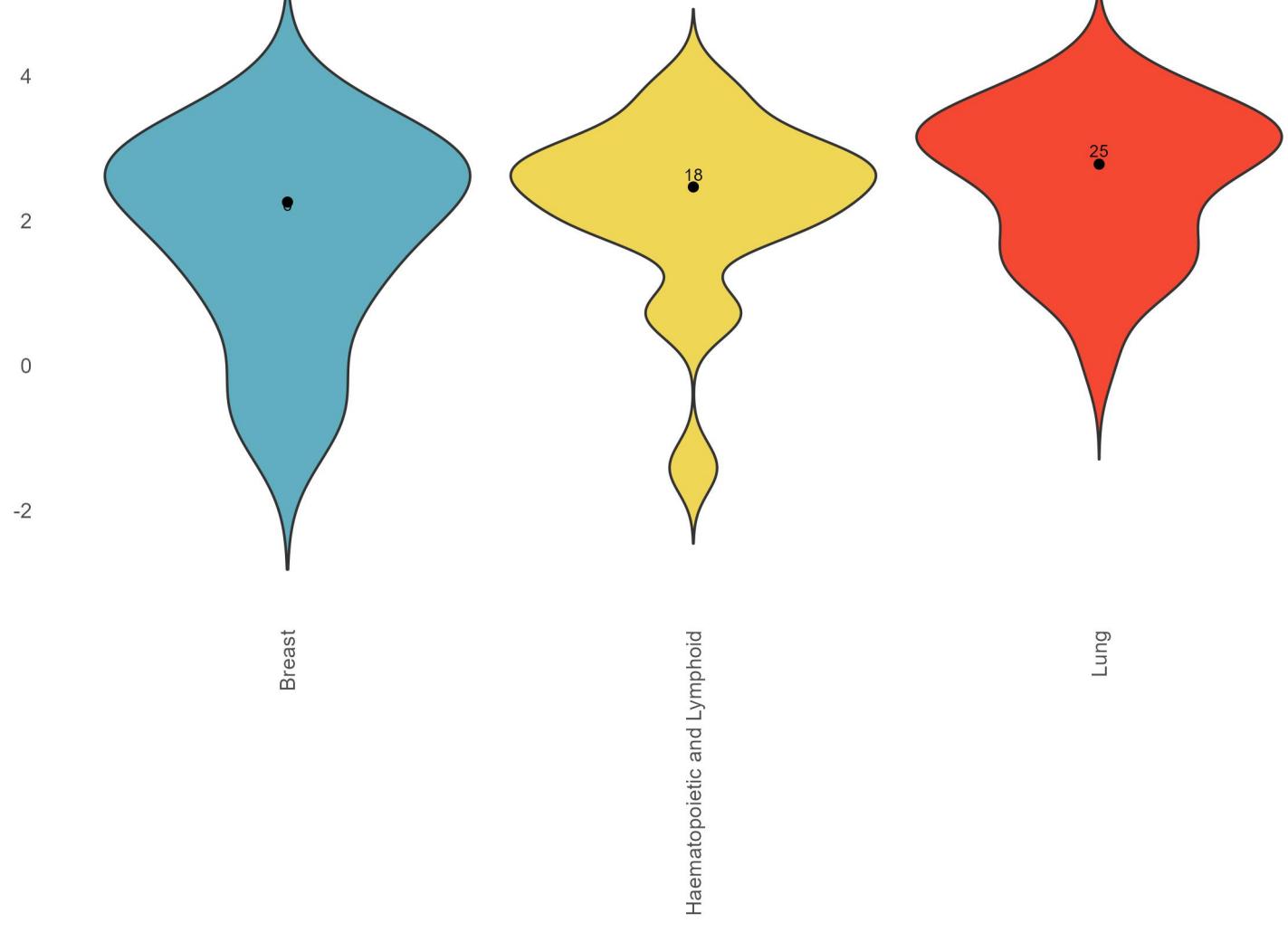


Density plot of CDKN1B protein compared to proteins with low and high abundance



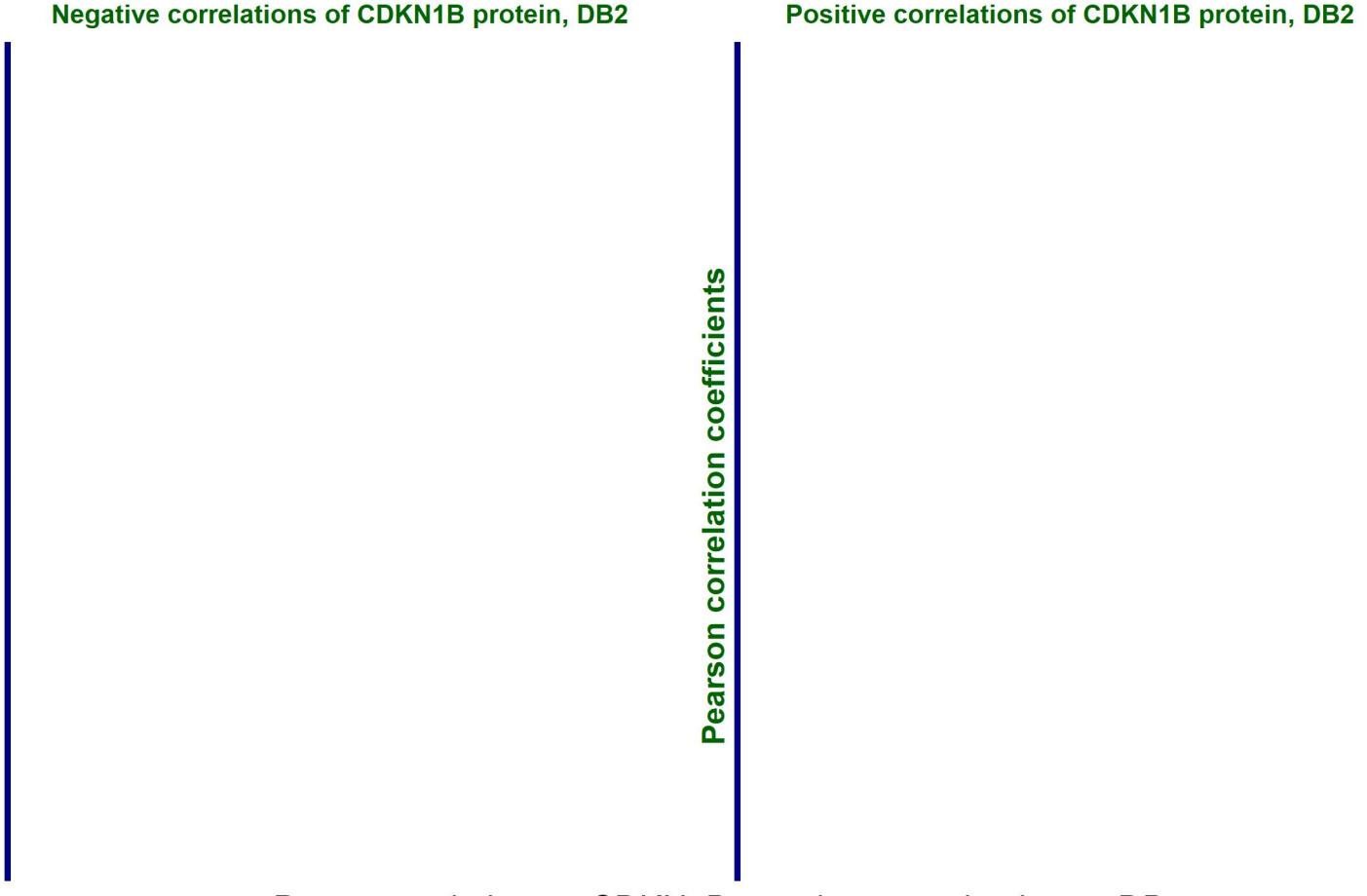
## Amount of CDKN1B protein, number of CCLs where it is present by tissue, DB2

ANOVA p value is 2.710e-03



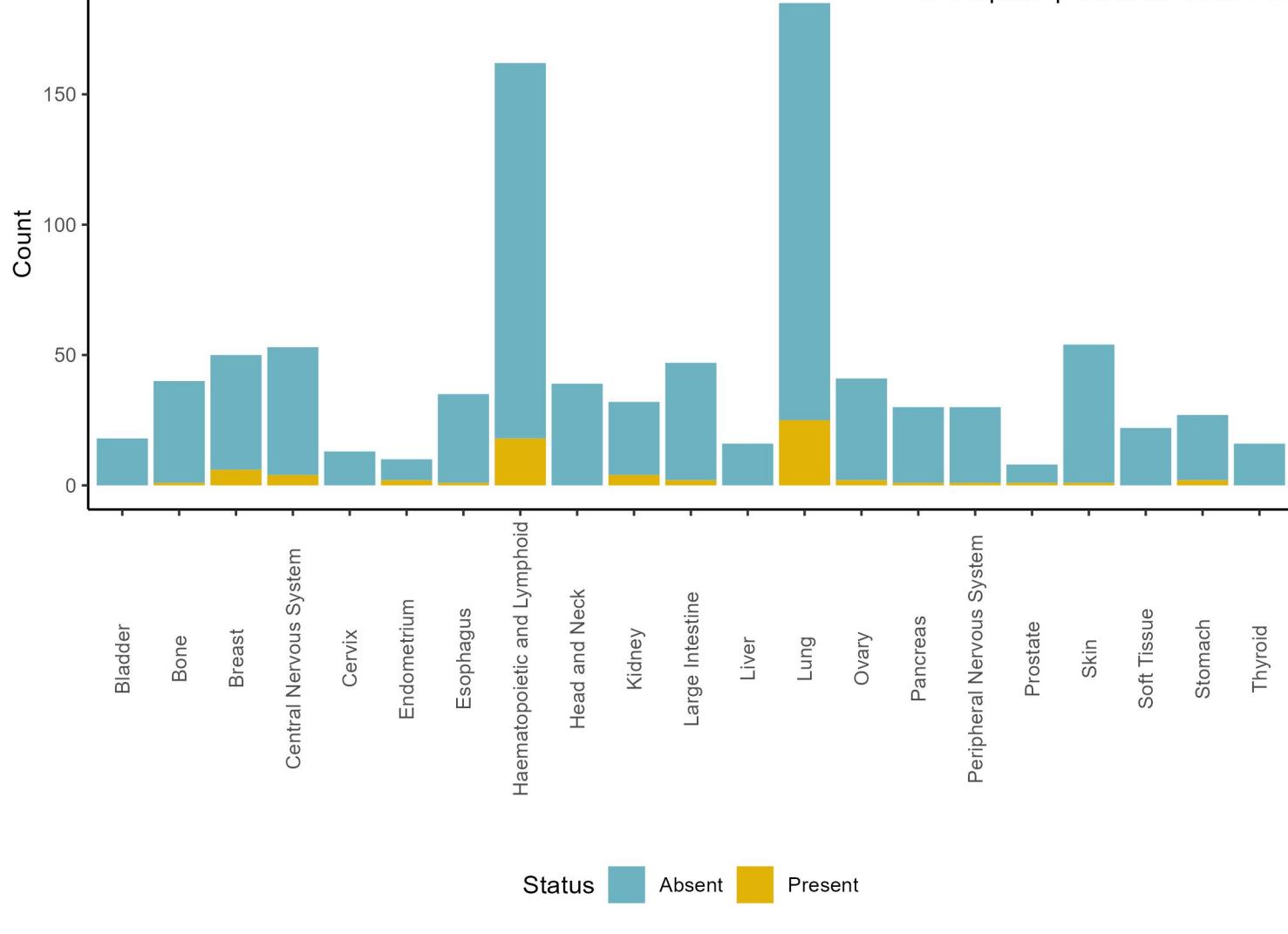
## Negative correlations of CDKN1B protein, DB2

### Pearson correlation coefficients



## Present and absent CDKN1B protein counts by tissue, DB2

Chi square p value is 2.089e-02

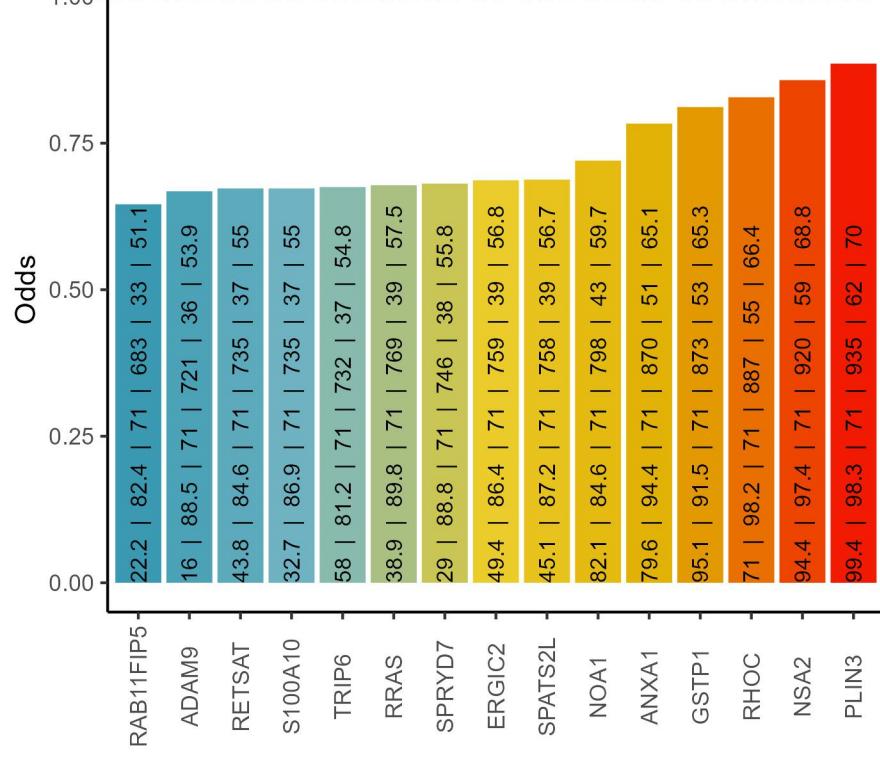


## Cooccurrence with CDKN1B protein, DB2

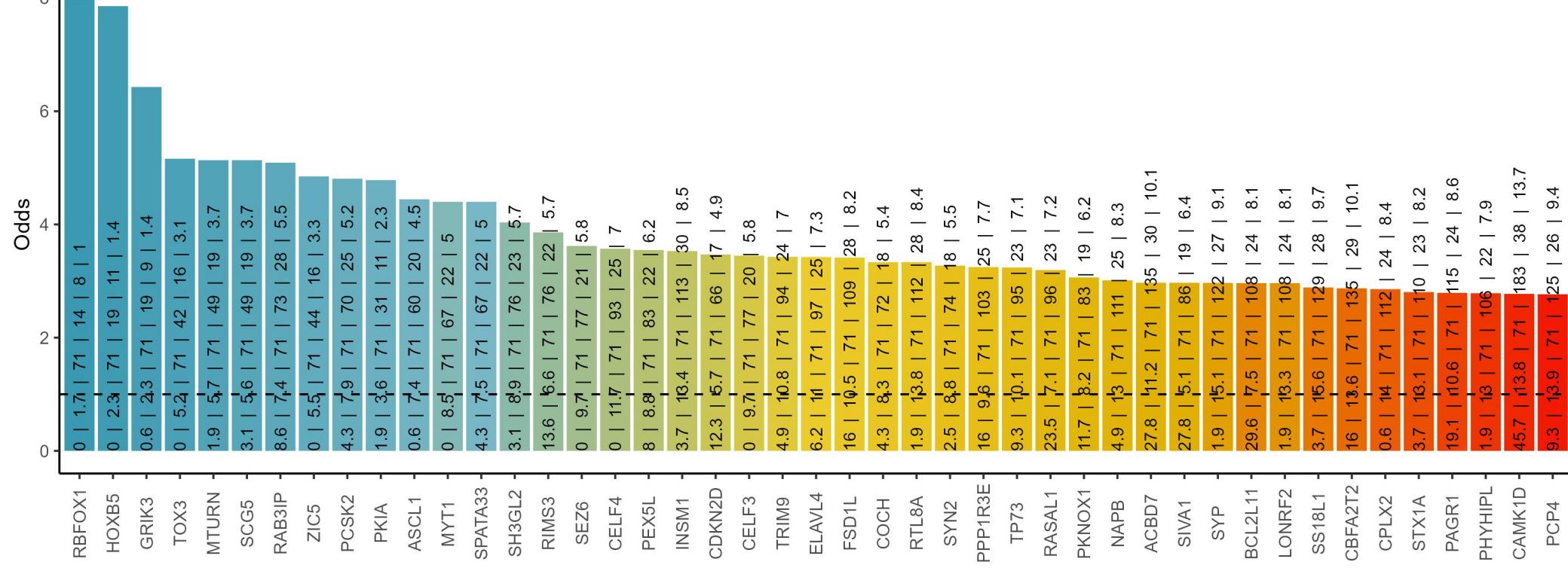
% of CDKN1B in blood cancers: 11.1 ; % of CDKN1B in solid cancers: 6.8

Text in the bars: % of Protein 2 in blood cancers | % of Protein 2 in solid cancers | incidence of CDKN1B | incidence of Protein 2 | observed cooccurrence | expected cooccurrence

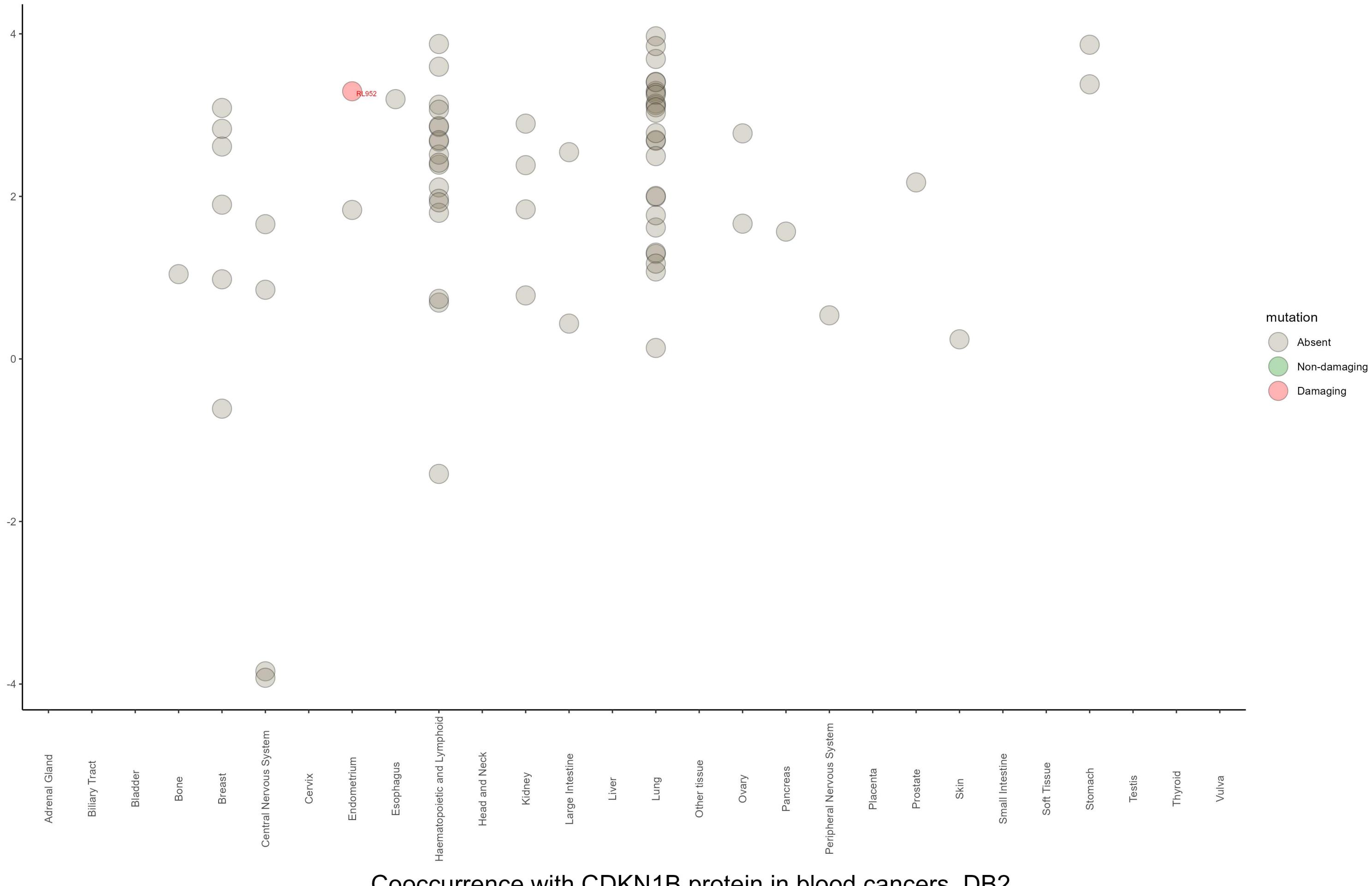
### Negative cooccurrence



### Positive cooccurrence

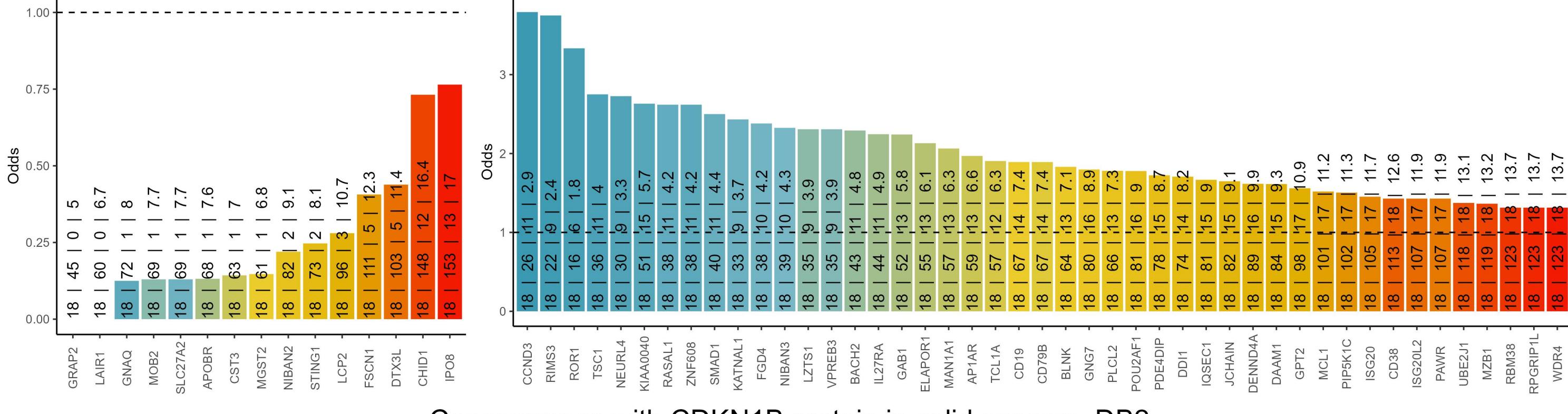


# Amount of CDKN1B protein and mutation status by tissue, DB2



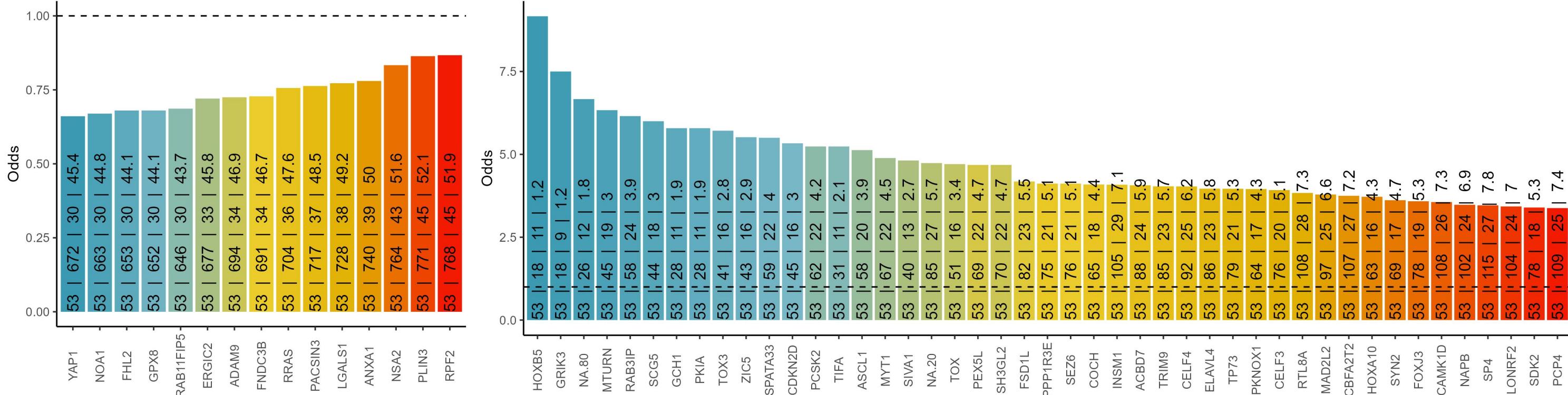
## Cooccurrence with CDKN1B protein in blood cancers, DB2

The text in the bars: incidence of CDKN1B | incidence of Protein 2 | observed cooccurrence | expected cooccurrence

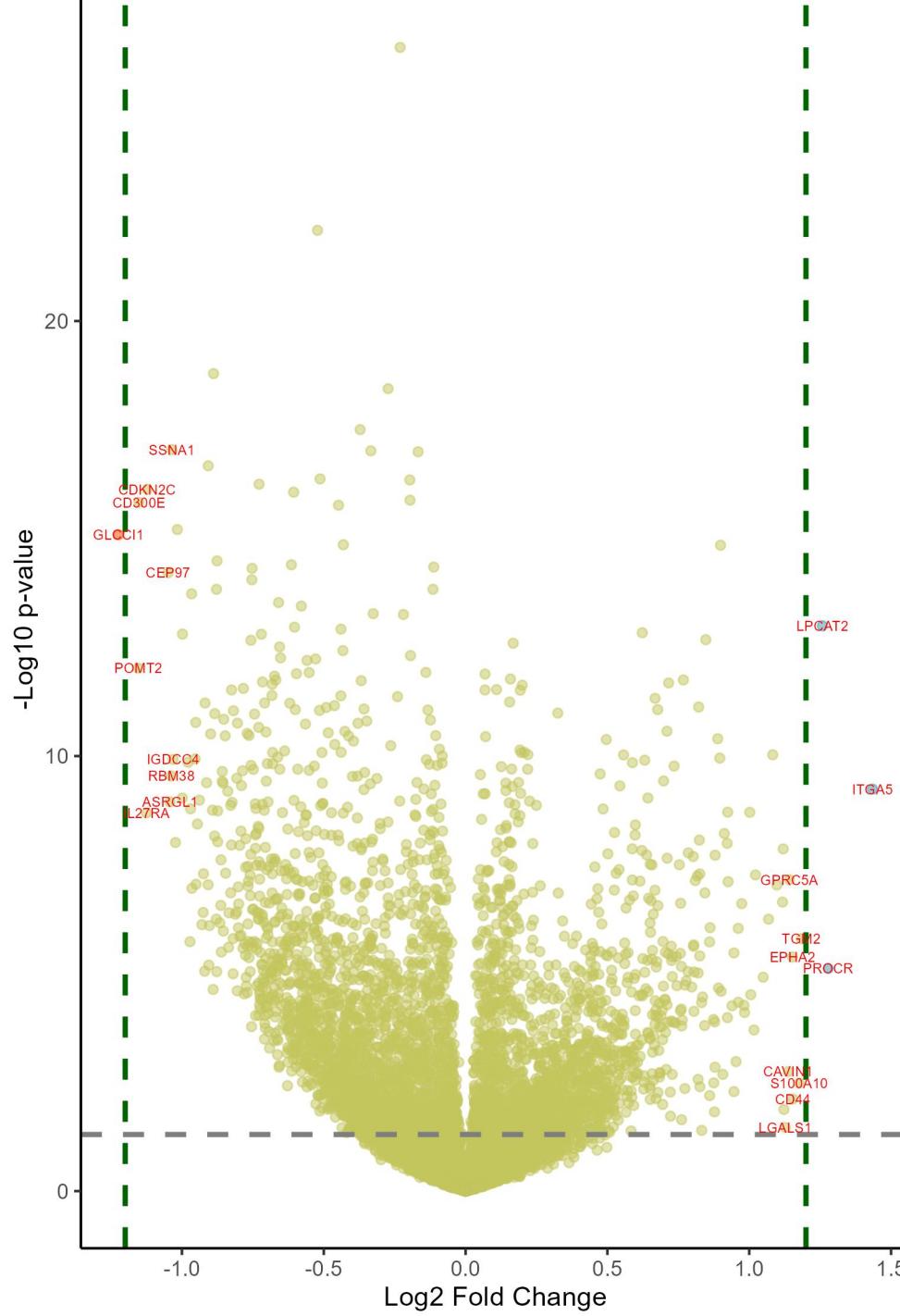


## Cooccurrence with CDKN1B protein in solid cancers, DB2

The text in the bars: incidence of CDKN1B | incidence of Protein 2 | observed cooccurrence | expected cooccurrence

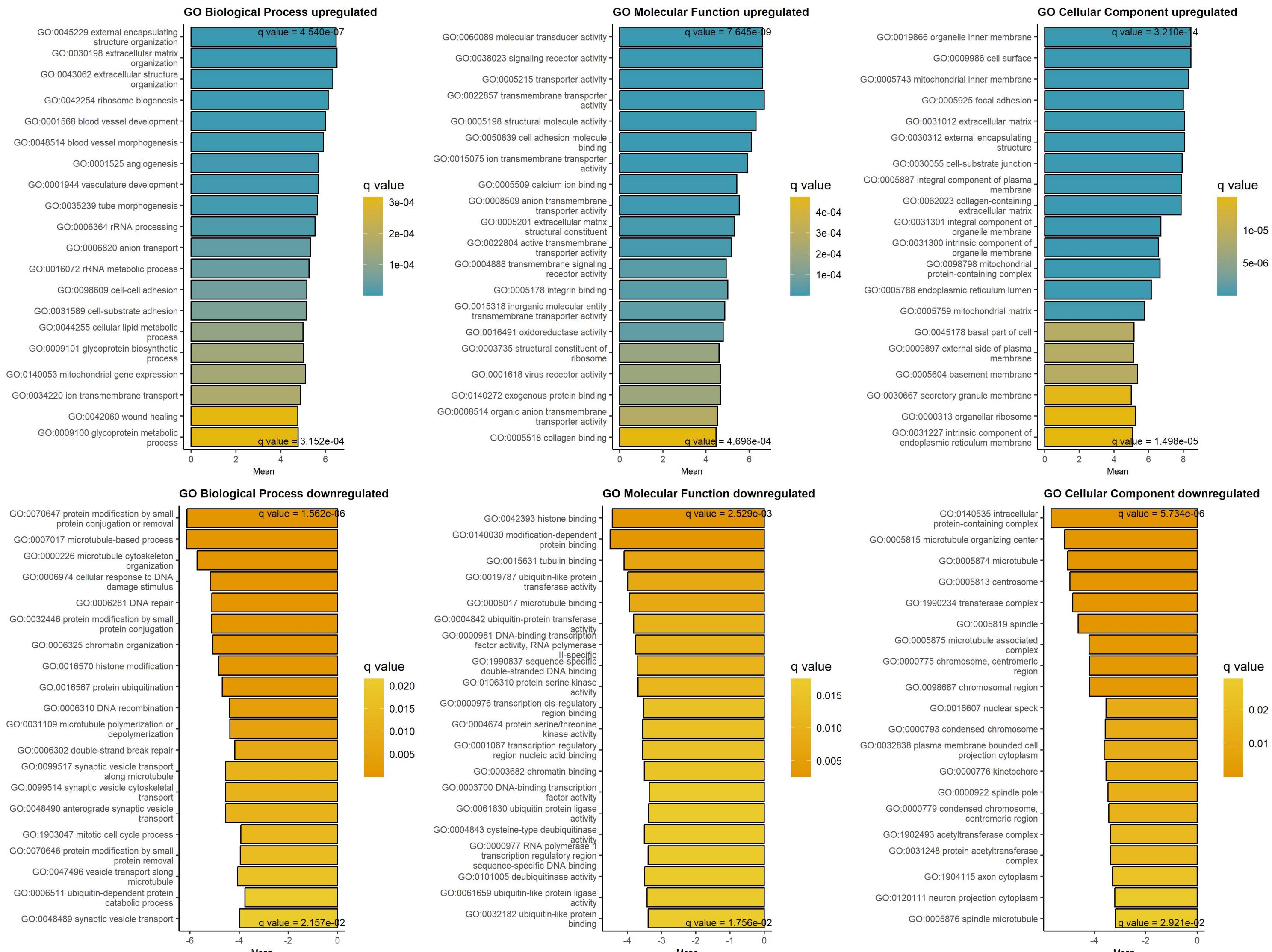


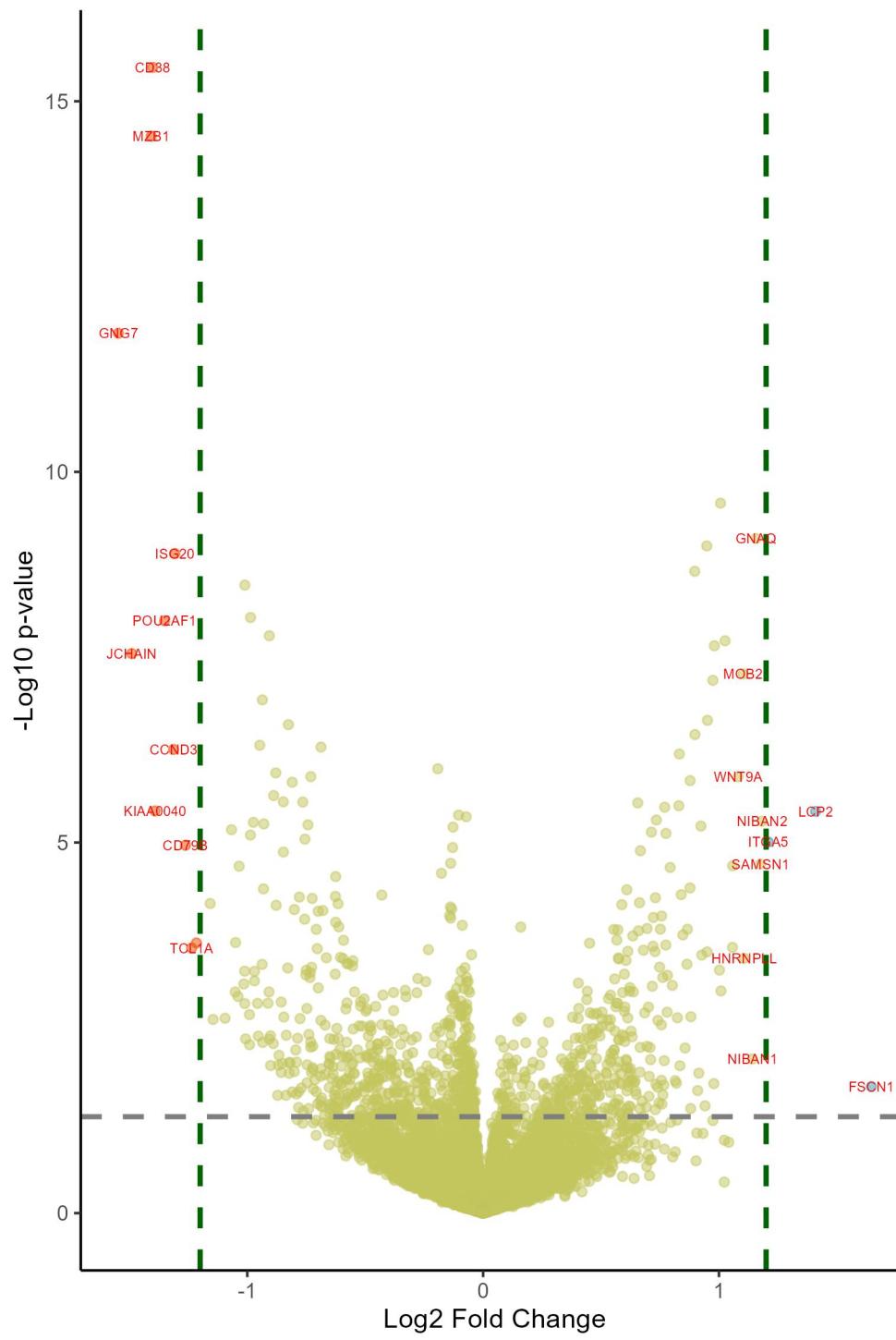
### Downregulated at low/absent CDKN1B      Upregulated at low/absent CDKN1B



logFC	adj.P.Val	symbol	name	logFC	adj.P.Val	symbol	name
-1.22	3.41e-13	GLCC1	glucocorticoid induced 1	1.43	2.76e-08	ITGA5	integrin subunit alpha 5
-1.15	1.57e-10	POMT2	protein O-mannosyltransferase 2	1.28	7.60e-05	PROCR	protein C receptor
-1.15	7.27e-14	CD300E	CD300e molecule	1.26	2.36e-11	LPCAT2	lysophosphatidylcholine acyltransfe
-1.12	7.85e-08	IL27RA	interleukin 27 receptor subunit alp	1.18	2.12e-05	TGM2	transglutaminase 2
-1.12	4.41e-14	CDKN2C	cyclin dependent kinase inhibitor 2	1.18	1.15e-02	S100A10	S100 calcium binding protein A10
-1.05	1.89e-12	CEP97	centrosomal protein 97	1.15	2.33e-02	CD44	CD44 molecule (Indian blood group)
-1.04	4.99e-08	ASRGL1	asparaginase and isoaspartyl peptid	1.15	4.64e-05	EPHA2	EPH receptor A2
-1.04	1.56e-08	RBM38	RNA binding motif protein 38	1.14	1.57e-06	GPRC5A	G protein-coupled receptor class C
-1.04	9.40e-15	SSNA1	SS nuclear autoantigen 1	1.14	7.03e-03	CAVIN1	caveolae associated protein 1
-1.03	7.71e-09	IGDCC4	immunoglobulin superfamily DCC subc	1.13	7.70e-02	LGALS1	galectin 1
-1.02	3.04e-07	INSM1	INSM transcriptional repressor 1	1.12	3.58e-02	ANXA1	annexin A1
-1.02	2.74e-13	PPP1R2	protein phosphatase 1 regulatory in	1.12	4.01e-07	HMGAA2	high mobility group AT-hook 2
-1	4.21e-08	HDAC6	histone deacetylase 6	1.12	4.09e-06	ADGRE5	adhesion G protein-coupled receptor
-1	3.23e-11	UNK	unk zinc finger	1.1	1.96e-06	PRNP	prion protein
-0.98	8.81e-09	TMED8	transmembrane p24 trafficking prote	1.08	6.34e-09	CAVIN3	caveolae associated protein 3
-0.97	2.41e-05	SCG3	secretogranin III	1.07	8.81e-06	SPESP1	sperm equatorial segment protein 1
-0.97	6.68e-08	MAPKAPK2	MAPK activated protein kinase 2	1.05	1.11e-04	ZNF671	zinc finger protein 671
-0.97	5.03e-12	WDR37	WD repeat domain 37	1.02	1.25e-06	RAB32	RAB32, member RAS oncogene family
-0.96	2.26e-06	RPAIN	RPA interacting protein	1.02	1.13e-03	RHOC	ras homolog family member C
-0.95	7.59e-09	CRTC1	CREB regulated transcription coacti	1.01	2.38e-04	GPX8	glutathione peroxidase 8 (putative)
-0.95	1.52e-09	CAMSAP3	calmodulin regulated spectrin assoc	1	7.72e-08	RETSAT	retinol saturase
-0.95	1.91e-06	CAMK1D	calcium/calmodulin dependent protei	0.98	5.16e-04	ADAM9	ADAM metallopeptidase domain 9
-0.95	1.32e-07	KDM4A	lysine demethylase 4A	0.98	3.78e-04	RRAS	RAS related
-0.94	4.66e-08	SYNRG	synergin gamma	0.97	4.38e-06	YAP1	Yes1 associated transcriptional reg
-0.93	1.13e-05	SYT1	synaptotagmin 1	0.96	3.31e-04	MMP14	matrix metallopeptidase 14
-0.93	6.55e-06	LVRN	laeverin	0.96	1.32e-05	CTSL	cathepsin L
-0.92	1.20e-06	SEPTIN3	septin 3	0.95	4.56e-03	EGFR	epidermal growth factor receptor
-0.92	8.67e-05	SCGN	secretoginin, EF-hand calcium bindi	0.95	1.68e-02	BTNL8	butyrophilin like 8
-0.92	6.62e-10	BCL7A	BAF chromatin remodeling complex su	0.95	3.88e-05	CABP7	calcium binding protein 7

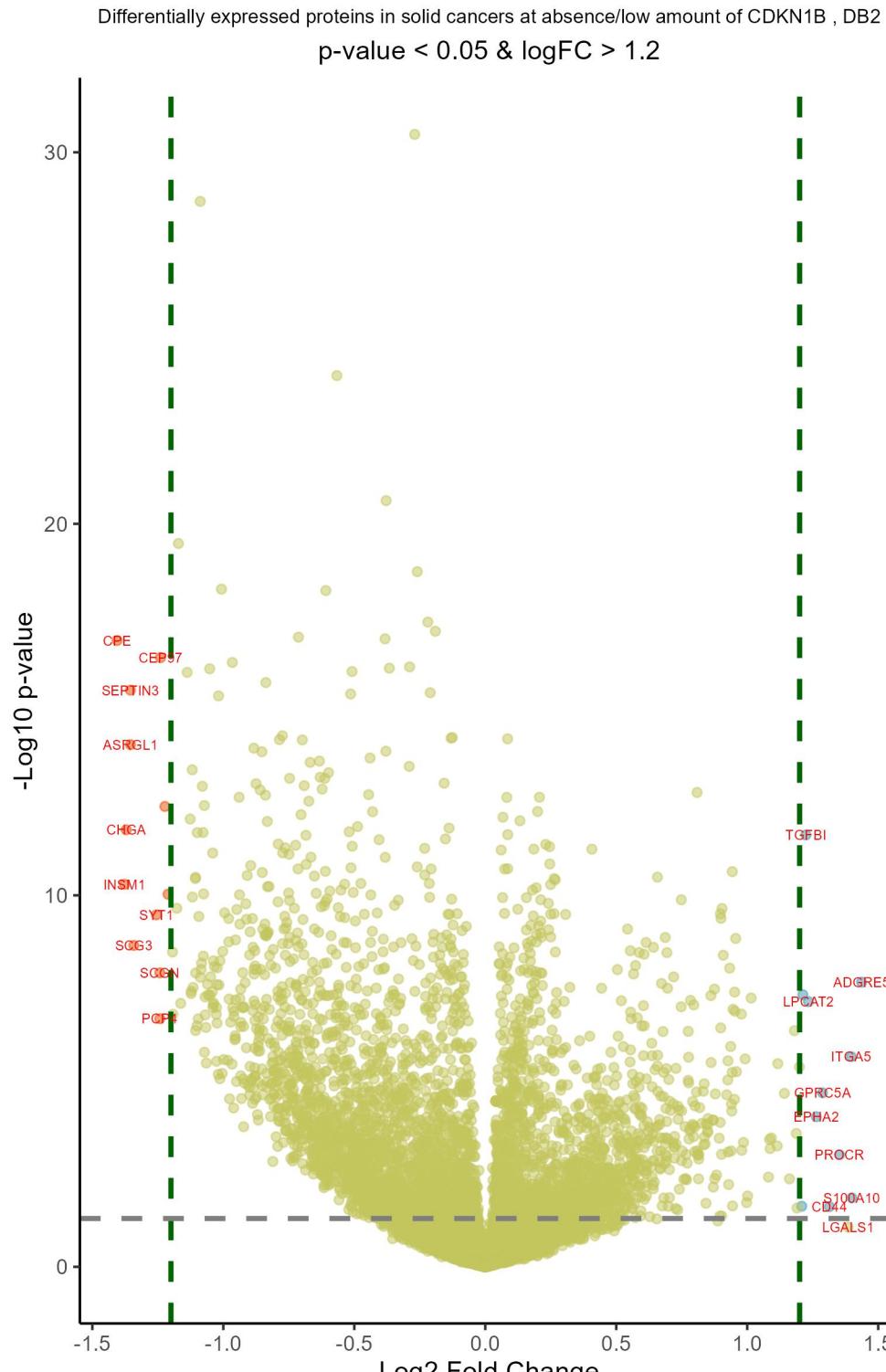
### GAGE analysis on upregulated and downregulated proteins at low/absent CDKN1B protein, DB2





Downregulated in blood cancers at low/absent CDKN1B   Upregulated in blood cancers at low/absent CDKN1B

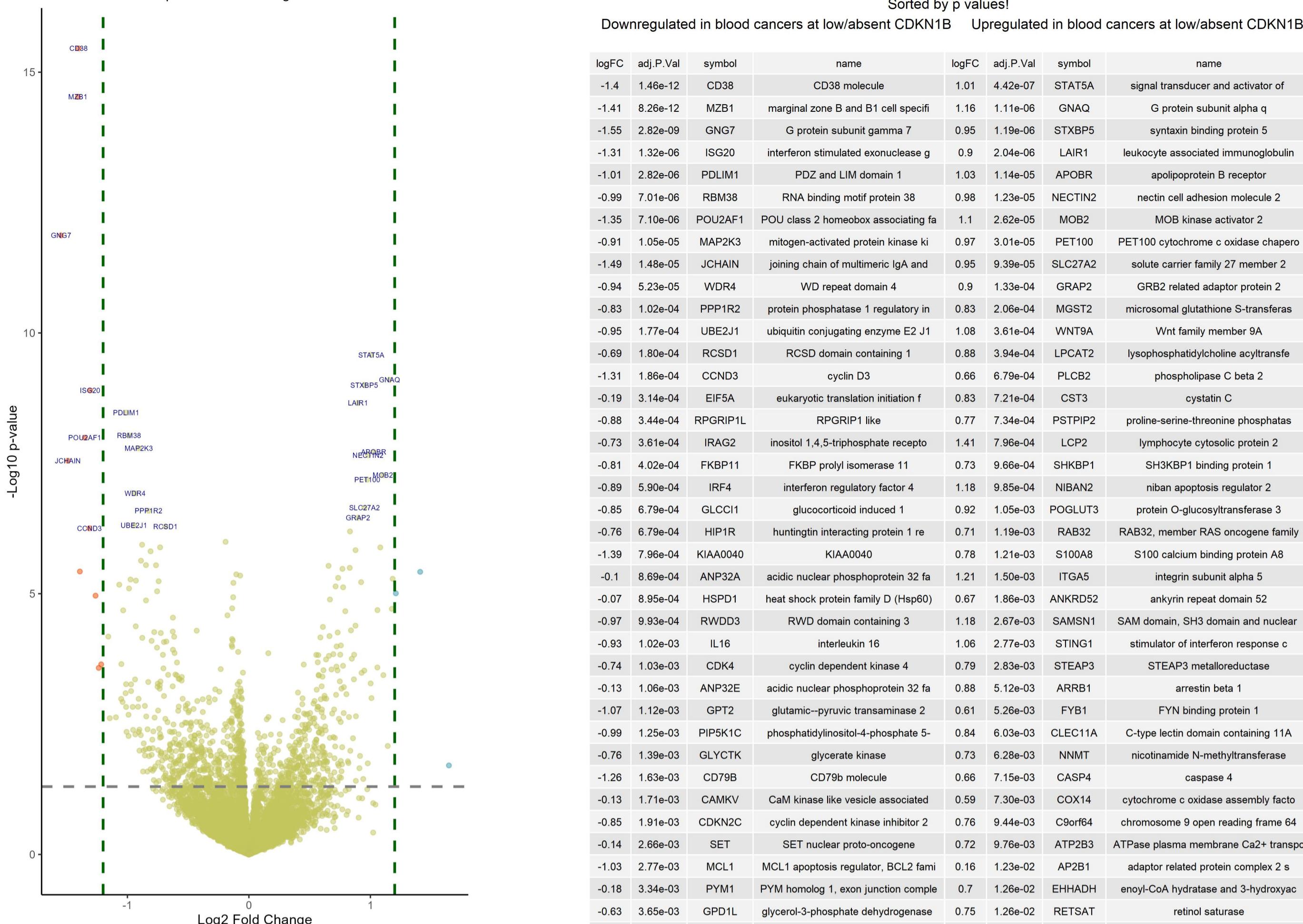
logFC	adj.P.Val	symbol	name	logFC	adj.P.Val	symbol	name
-1.55	2.82e-09	GNG7	G protein subunit gamma 7	1.65	2.59e-01	FSCN1	fascin actin-bundling protein 1
-1.49	1.48e-05	JCHAIN	joining chain of multimeric IgA and	1.41	7.96e-04	LCP2	lymphocyte cytosolic protein 2
-1.41	8.26e-12	MZB1	marginal zone B and B1 cell specifi	1.21	1.50e-03	ITGA5	integrin subunit alpha 5
-1.4	1.46e-12	CD38	CD38 molecule	1.18	9.85e-04	NIBAN2	niban apoptosis regulator 2
-1.39	7.96e-04	KIAA0040	KIAA0040	1.18	2.67e-03	SAMSIN1	SAM domain, SH3 domain and nuclear
-1.35	7.10e-06	POU2AF1	POU class 2 homeobox associating fa	1.16	1.11e-06	GNAQ	G protein subunit alpha q
-1.31	1.86e-04	CCND3	cyclin D3	1.14	1.74e-01	NIBAN1	niban apoptosis regulator 1
-1.31	1.32e-06	ISG20	interferon stimulated exonuclease g	1.11	2.46e-02	HNRNPLL	heterogeneous nuclear ribonucleopro
-1.26	1.63e-03	CD79B	CD79b molecule	1.1	2.62e-05	MOB2	MOB kinase activator 2
-1.24	1.98e-02	TCL1A	TCL1 family AKT coactivator A	1.08	3.61e-04	WNT9A	Wnt family member 9A
-1.22	1.77e-02	ELAPOR1	endosome-lysosome associated apopto	1.06	2.77e-03	STING1	stimulator of interferon response c
-1.16	7.18e-03	CD19	CD19 molecule	1.06	1.96e-02	ANPEP	alanyl aminopeptidase, membrane
-1.15	8.42e-02	NIBAN3	niban apoptosis regulator 3	1.04	5.65e-01	S100A6	S100 calcium binding protein A6
-1.09	8.25e-02	IL27RA	interleukin 27 receptor subunit alp	1.03	1.14e-05	APOBR	apolipoprotein B receptor
-1.07	1.12e-03	GPT2	glutamic--pyruvic transaminase 2	1.02	7.81e-01	ENO3	enolase 3
-1.05	4.99e-02	UCHL1	ubiquitin C-terminal hydrolase L1	1.02	5.51e-01	ACTN1	actinin alpha 1
-1.05	1.76e-02	PAX5	paired box 5	1.01	4.99e-02	EPDR1	ependymin related 1
-1.04	5.45e-02	HLA-DRB3	major histocompatibility complex, c	1.01	4.42e-07	STAT5A	signal transducer and activator of
-1.03	2.77e-03	MCL1	MCL1 apoptosis regulator, BCL2 fami	1	3.19e-02	MYO1F	myosin IF
-1.01	4.26e-02	AP1AR	adaptor related protein complex 1 a	0.98	1.23e-05	NECTIN2	nectin cell adhesion molecule 2
-1.01	3.22e-02	PLCL2	phospholipase C like 2	0.98	2.47e-01	BIN2	bridging integrator 2
-1.01	6.26e-02	BLNK	B cell linker	0.97	3.01e-05	PET100	PET100 cytochrome c oxidase chapero
-1.01	2.82e-06	PDLIM1	PDZ and LIM domain 1	0.97	4.36e-01	CPT1A	carnitine palmitoyltransferase 1A
-1.01	1.21e-01	ST14	ST14 transmembrane serine protease	0.95	9.39e-05	SLC27A2	solute carrier family 27 member 2
-0.99	7.72e-02	MAN1A1	mannosidase alpha class 1A member 1	0.95	2.12e-02	CTSG	cathepsin G
-0.99	1.35e-01	BACH2	BTB domain and CNC homolog 2	0.95	1.19e-06	STXBP5	syntaxin binding protein 5
-0.99	1.25e-03	PIP5K1C	phosphatidylinositol-4-phosphate 5-	0.94	3.52e-01	GPHN	gephyrin
-0.99	7.01e-06	RBM38	RNA binding motif protein 38	0.93	5.10e-01	SH3RF1	SH3 domain containing ring finger 1
-0.97	9.93e-04	RWDD3	RWD domain containing 3	0.93	2.30e-02	FAM20B	FAM20B glycosaminoglycan xylosylkin



Downregulated in solid cancers at low/absent CDKN1B   Upregulated in solid cancers at low/absent CDKN1B

logFC	adj.P.Val	symbol	name	logFC	adj.P.Val	symbol	name
-1.41	8.25e-15	CPE	carboxypeptidase E	1.44	5.23e-07	ADGRE5	adhesion G protein-coupled receptor
-1.38	3.62e-09	INSM1	INSM transcriptional repressor 1	1.4	3.71e-02	S100A10	S100 calcium binding protein A10
-1.37	2.06e-10	CHGA	chromogranin A	1.4	2.55e-05	ITGA5	integrin subunit alpha 5
-1.35	1.09e-13	SEPTIN3	septin 3	1.39	1.55e-01	LGALS1	galectin 1
-1.35	2.23e-12	ASRGL1	asparaginase and isoaspartyl peptid	1.35	4.01e-03	PROCR	protein C receptor
-1.34	7.98e-08	SCG3	secretogranin III	1.31	5.71e-02	CD44	CD44 molecule (Indian blood group)
-1.26	1.69e-08	SYTT1	synaptotagmin 1	1.29	1.67e-04	GPRC5A	G protein-coupled receptor class C
-1.24	3.35e-06	PCP4	Purkinje cell protein 4	1.26	5.64e-04	EPHA2	EPH receptor A2
-1.24	3.17e-07	SCGN	secretogogin, EF-hand calcium bindi	1.23	1.39e-06	LPCAT2	lysophosphatidylcholine acyltransfe
-1.24	2.24e-14	CEP97	centrosomal protein 97	1.22	2.65e-10	TGFBI	transforming growth factor beta ind
-1.22	5.65e-11	CD300E	CD300e molecule	1.21	9.87e-07	SPESP1	sperm equatorial segment protein 1
-1.21	6.05e-09	POMT2	protein O-mannosyltransferase 2	1.21	5.60e-02	CAVIN1	caveolae associated protein 1
-1.19	1.11e-07	GLCCI1	glucocorticoid induced 1	1.2	4.37e-05	HMGA2	high mobility group AT-hook 2
-1.19	2.63e-06	CELF4	CUGBP Elav-like family member 4	1.19	6.09e-02	ANXA1	annexin A1
-1.18	1.24e-08	CDKN2A	cyclin dependent kinase inhibitor 2	1.19	1.33e-03	TGM2	transglutaminase 2
-1.17	4.72e-17	MAP2	microtubule associated protein 2	1.18	6.32e-06	CAVIN3	caveolae associated protein 3
-1.16	1.52e-06	GNG4	G protein subunit gamma 4	1.16	1.41e-02	BTNL8	butyrophilin like 8
-1.14	3.97e-14	CAMSAP3	calmodulin regulated spectrin assoc	1.14	1.72e-04	PRNP	prion protein
-1.13	1.14e-10	PRR36	proline rich 36	1.12	3.65e-05	SP100	SP100 nuclear antigen
-1.12	9.30e-07	SYN1	synapsin I	1.11	2.52e-03	ZNF671	zinc finger protein 671
-1.12	8.30e-07	MAD2L2	mitotic arrest deficient 2 like 2	1.09	1.69e-03	MMP14	matrix metallopeptidase 14
-1.12	8.51e-12	SSNA1	SS nuclear autoantigen 1	1.09	2.90e-03	ICAM1	intercellular adhesion molecule 1
-1.12	7.04e-09	RUFY3	RUN and FYVE domain containing 3	1.09	1.82e-03	GPX8	glutathione peroxidase 8 (putative)
-1.12	6.85e-07	CBFA2T2	CBFA2/RUNX1 partner transcriptional	1.08	1.29e-02	EGFR	epidermal growth factor receptor
-1.11	2.65e-09	LCMT1	leucine carboxyl methyltransferase	1.01	1.17e-06	GGCX	gamma-glutamyl carboxylase
-1.11	2.49e-09	CDKN2C	cyclin dependent kinase inhibitor 2	1	3.37e-02	CAV1	caveolin 1
-1.11	6.26e-06	IL27RA	interleukin 27 receptor subunit alp	1	4.70e-02	CTS2	cathepsin Z
-1.11	3.20e-07	DCLK1	doublecortin like kinase 1	0.99	2.86e-05	YAP1	Yes1 associated transcriptional reg
-1.1	4.91e-06	AP3B2	adaptor related protein complex 3 s	0.99	2.11e-03	CABP7	calcium binding protein 7

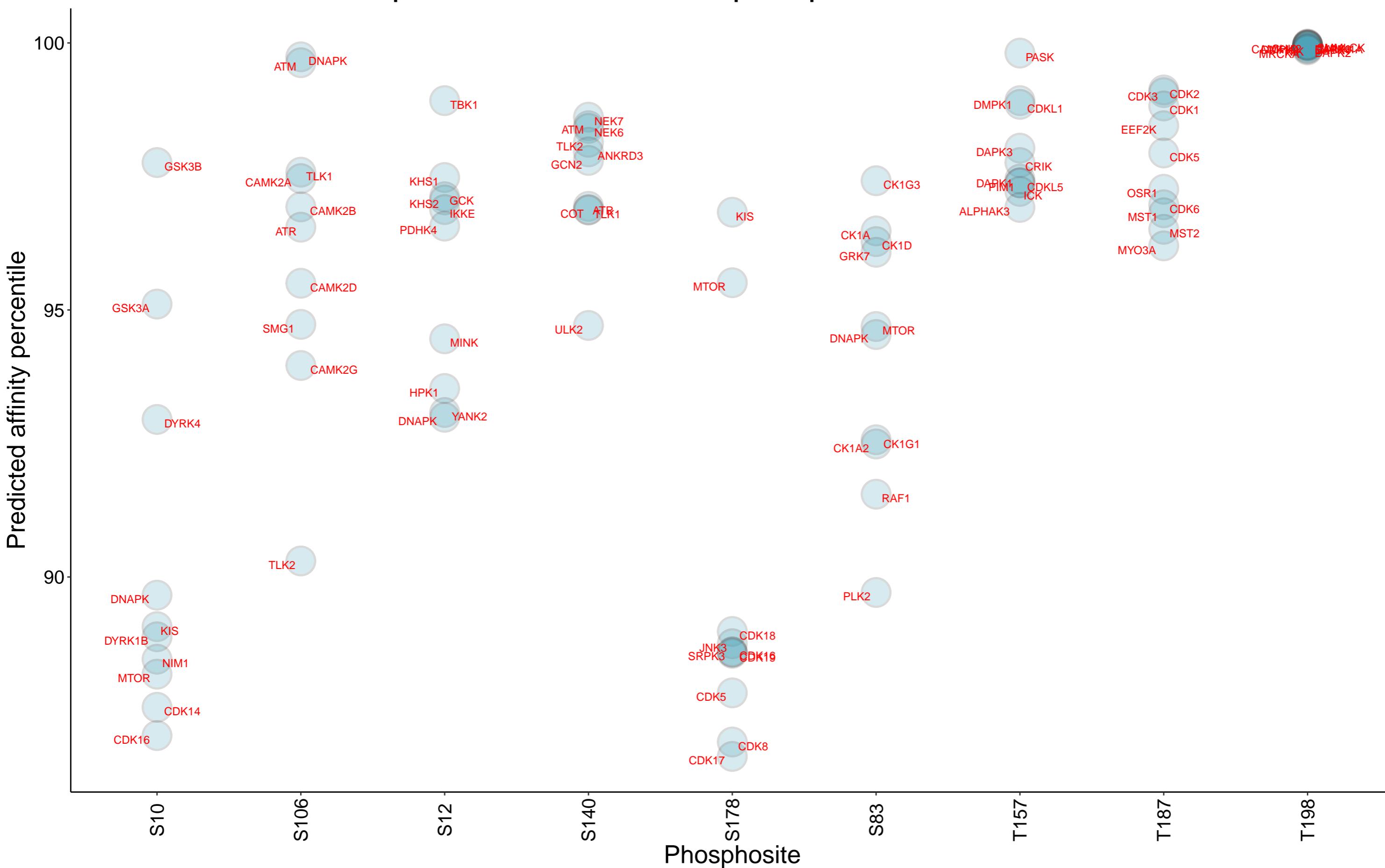
CDKN1B network, DB2, no Pearson r &gt; 0.3



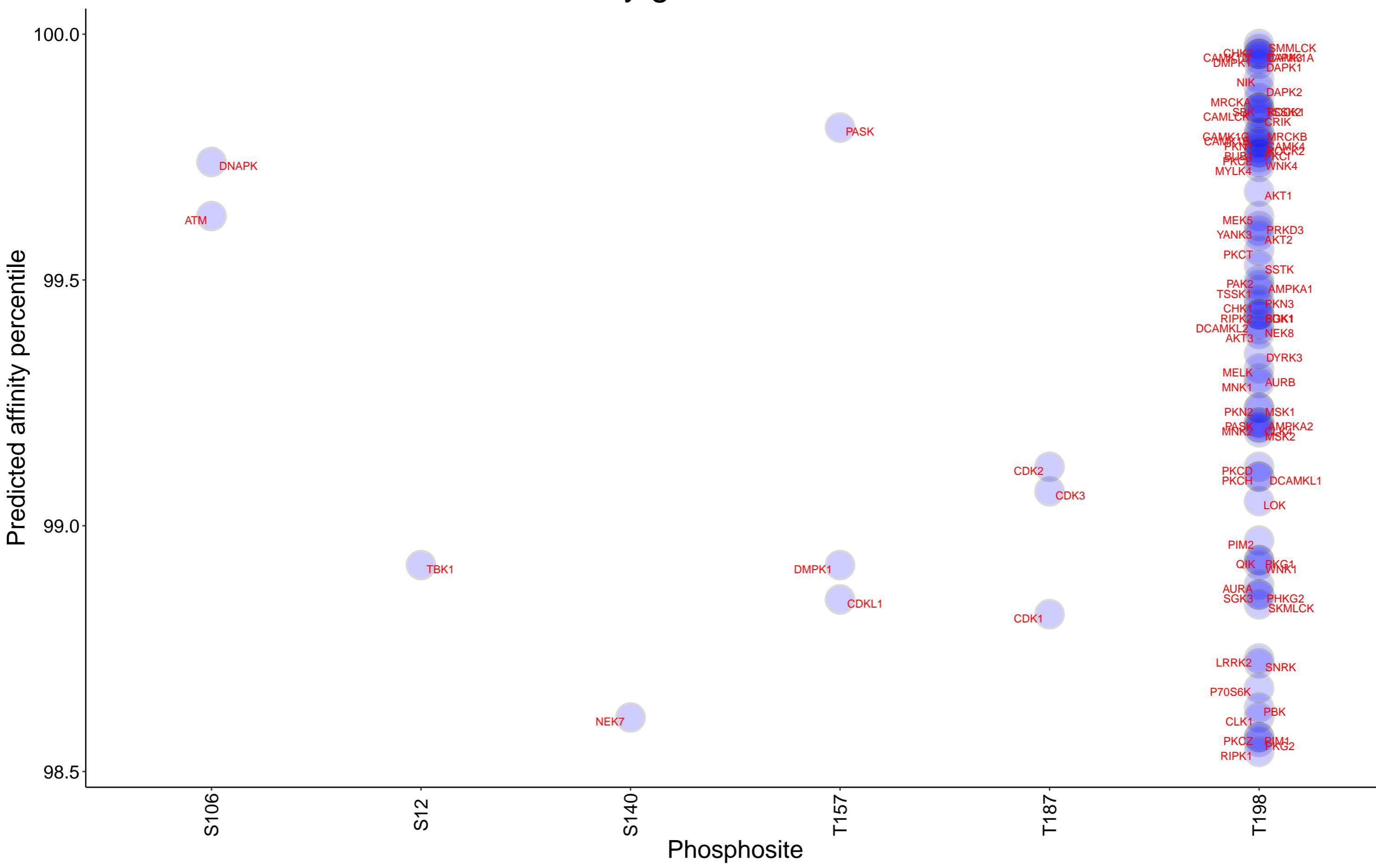
Insufficient number of paired observations in DB2 for CDKN1B

Insufficient number of paired observations in DB2 for CDKN1B

# Top 10 kinases for each phosphosite in CDKN1B



## Kinases with affinity greater than 98.5% to CDKN1B



No sufficient number of paired observations in DB2 for CDKN1B