

## Targeted Gene Regions Interrogated by Solid Tumor Targeted Cancer Gene Panel by Next Generation Sequencing

Gene	GenBank Accession Number	Nucleotide Start*	Nucleotide End
ABL1	NM_005157.4	133738295	133738378
ABL1	NM_005157.4	133747511	133747530
ABL1	NM_005157.4	133748280	133748417
ABL1	NM_005157.4	133750308	133750405
AKT1	NM_005163.2	105241434	105241519
AKT1	NM_005163.2	105246446	105246558
ALK	NM_004304.4	29432647	29432680
ALK	NM_004304.4	29443608	29443706
APC	NM_001127511.2	112173872	112173962
APC	NM_001127511.2	112174558	112174666
APC	NM_001127511.2	112175144	112175268
APC	NM_001127511.2	112175316	112175443
APC	NM_001127511.2	112175568	112175703
APC	NM_001127511.2	112175741	112175862
APC	NM_001127511.2	112175921	112176035
ATM	NM_000051.3	108117766	108117859
ATM	NM_000051.3	108119816	108119834
ATM	NM_000051.3	108123539	108123618
ATM	NM_000051.3	108137932	108138025
ATM	NM_000051.3	108155084	108155180
ATM	NM_000051.3	108170457	108170556
ATM	NM_000051.3	108172370	108172467
ATM	NM_000051.3	108173631	108173703
ATM	NM_000051.3	108180903	108180960
ATM	NM_000051.3	108200936	108200993
ATM	NM_000051.3	108205732	108205816
ATM	NM_000051.3	108206567	108206628
ATM	NM_000051.3	108218016	108218097
ATM	NM_000051.3	108225550	108225606
ATM	NM_000051.3	108236047	108236140
ATM	NM_000051.3	108236187	108236240
BRAF	NM_004333.4	140453103	140453198
BRAF	NM_004333.4	140481392	140481498

Gene	GenBank Accession Number	Nucleotide Start*	Nucleotide End
CDH1	NM_004360.3	68835603	68835697
CDH1	NM_004360.3	68846033	68846151
CDH1	NM_004360.3	68847211	68847302
CDKN2A	NM_000077.4	21970941	21971066
CDKN2A	NM_000077.4	21971091	21971212
CSF1R	NM_005211.3	149433627	149433692
CSF1R	NM_005211.3	149452992	149453061
CTNNB1	NM_001904.3	41266030	41266147
EGFR	NM_005228.3	55211045	55211126
EGFR	NM_005228.3	55221793	55221850
EGFR	NM_005228.3	55232968	55233053
EGFR	NM_005228.3	55241636	55241729
EGFR	NM_005228.3	55242412	55242518
EGFR	NM_005228.3	55248981	55249090
EGFR	NM_005228.3	55249123	55249176
EGFR	NM_005228.3	55259508	55259572
ERBB2	NM_004448.2	37880213	37880268
ERBB2	NM_004448.2	37880974	37881061
ERBB2	NM_004448.2	37881325	37881453
ERBB4	NM_005235.2	212288905	212288990
ERBB4	NM_005235.2	212530052	212530180
ERBB4	NM_005235.2	212576800	212576906
ERBB4	NM_005235.2	212578289	212578378
ERBB4	NM_005235.2	212587134	212587239
ERBB4	NM_005235.2	212589796	212589867
ERBB4	NM_005235.2	212652745	212652806
ERBB4	NM_005235.2	212812150	212812169
EZH2	NM_004456.4	148508712	148508791
FBXW7	NM_033632.3	153245411	153245492
FBXW7	NM_033632.3	153247278	153247369
FBXW7	NM_033632.3	153249356	153249477
FBXW7	NM_033632.3	153250853	153250926
FBXW7	NM_033632.3	153258949	153259023
FGFR1	NM_023110.2	38282141	38282222
FGFR1	NM_023110.2	38285859	38285958
FGFR2	NM_000141.4	123258004	123258045
FGFR2	NM_000141.4	123274722	123274835
FGFR2	NM_000141.4	123279488	123279544

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Gene	GenBank Accession Number	Nucleotide Start*	Nucleotide End
FGFR2	NM_000141.4	123279608	123279688
FGFR3	NM_000142.4	1803557	1803653
FGFR3	NM_000142.4	1806082	1806187
FGFR3	NM_000142.4	1807834	1807905
FGFR3	NM_000142.4	1808312	1808399
FGFR3	NM_000142.4	1808882	1808994
FLT3	NM_004119.2	28592599	28592663
FLT3	NM_004119.2	28602310	28602379
FLT3	NM_004119.2	28608228	28608348
FLT3	NM_004119.2	28610094	28610184
GNA11	NM_002067.2	3118917	3118973
GNAQ	NM_002072.3	80409376	80409498
GNAS	NM_000516.4	57484400	57484483
GNAS	NM_000516.4	57484571	57484639
HNF1A	NM_000545.5	121431372	121431459
HNF1A	NM_000545.5	121432011	121432099
HRAS	NM_005343.2	533813	533930
HRAS	NM_005343.2	534221	534308
IDH1	NM_005896.3	209113104	209113206
IDH2	NM_002168.2	90631825	90631954
JAK2	NM_004972.3	5073730	5073790
JAK3	NM_000215.3	17945656	17945734
JAK3	NM_000215.3	17947987	17948027
JAK3	NM_000215.3	17954184	17954225
KDR	NM_002253.2	55946103	55946208
KDR	NM_002253.2	55946251	55946335
KDR	NM_002253.2	55953776	55953860
KDR	NM_002253.2	55955079	55955145
KDR	NM_002253.2	55960977	55961059
KDR	NM_002253.2	55962445	55962514
KDR	NM_002253.2	55972953	55972982
KDR	NM_002253.2	55979575	55979653
KDR	NM_002253.2	55980288	55980359
KIT	NM_000222.2	55561673	55561784
KIT	NM_000222.2	55592158	55592221
KIT	NM_000222.2	55593418	55593495
KIT	NM_000222.2	55593577	55593695

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Gene	GenBank Accession Number	Nucleotide Start*	Nucleotide End
KIT	NM_000222.2	55594172	55594279
KIT	NM_000222.2	55595497	55595562
KIT	NM_000222.2	55597489	55597524
KIT	NM_000222.2	55599281	55599358
KIT	NM_000222.2	55602674	55602751
KRAS	NM_033360.3	25378550	25378658
KRAS	NM_033360.3	25380261	25380351
KRAS	NM_033360.3	25398203	25398304
MET	NM_001127500.1	116339616	116339701
MET	NM_001127500.1	116340156	116340270
MET	NM_001127500.1	116403132	116403251
MET	NM_001127500.1	116411898	116411997
MET	NM_001127500.1	116417438	116417528
MET	NM_001127500.1	116423408	116423492
MLH1	NM_000249.3	37067208	37067333
MPL	NM_005373.2	43814969	43815035
NOTCH1	NM_017617.3	139390765	139390885
NOTCH1	NM_017617.3	139397763	139397787
NOTCH1	NM_017617.3	139399338	139399447
NPM1	NM_002520.6	170837526	170837574
NRAS	NM_002524.4	115252186	115252269
NRAS	NM_002524.4	115256505	115256584
NRAS	NM_002524.4	115258690	115258774
PDGFRA	NM_006206.4	55141003	55141103
PDGFRA	NM_006206.4	55144102	55144178
PDGFRA	NM_006206.4	55144539	55144653
PDGFRA	NM_006206.4	55152025	55152135
PIK3CA	NM_006218.2	178916776	178916881
PIK3CA	NM_006218.2	178916932	178916970
PIK3CA	NM_006218.2	178921465	178921570
PIK3CA	NM_006218.2	178927406	178927493
PIK3CA	NM_006218.2	178927969	178927986
PIK3CA	NM_006218.2	178928070	178928131
PIK3CA	NM_006218.2	178936024	178936105
PIK3CA	NM_006218.2	178938788	178938918
PIK3CA	NM_006218.2	178947819	178947896
PIK3CA	NM_006218.2	178951997	178952097
PIK3CA	NM_006218.2	178952141	178952237

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Gene	GenBank Accession Number	Nucleotide Start*	Nucleotide End
PTEN	NM_000314.4	89624222	89624300
PTEN	NM_000314.4	89685265	89685319
PTEN	NM_000314.4	89692814	89692920
PTEN	NM_000314.4	89711870	89711932
PTEN	NM_000314.4	89717605	89717620
PTEN	NM_000314.4	89717667	89717780
PTEN	NM_000314.4	89720785	89720880
PTPN11	NM_002834.3	112888119	112888228
PTPN11	NM_002834.3	112926836	112926961
RB1	NM_000321.2	48919224	48919312
RB1	NM_000321.2	48923140	48923164
RB1	NM_000321.2	48941625	48941724
RB1	NM_000321.2	48942658	48942711
RB1	NM_000321.2	48953754	48953791
RB1	NM_000321.2	48955526	48955584
RB1	NM_000321.2	49027124	49027178
RB1	NM_000321.2	49033828	49033934
RB1	NM_000321.2	49037862	49037932
RB1	NM_000321.2	49039150	49039232
RET	NM_020975.4	43609067	43609128
RET	NM_020975.4	43609923	43610010
RET	NM_020975.4	43613816	43613893
RET	NM_020975.4	43615547	43615656
RET	NM_020975.4	43617389	43617433
SMAD4	NM_005359.5	48575100	48575213
SMAD4	NM_005359.5	48575660	48575677
SMAD4	NM_005359.5	48581191	48581302
SMAD4	NM_005359.5	48584552	48584619
SMAD4	NM_005359.5	48586252	48586291
SMAD4	NM_005359.5	48591815	48591931
SMAD4	NM_005359.5	48593400	48593519
SMAD4	NM_005359.5	48603029	48603119
SMAD4	NM_005359.5	48604659	48604774
SMARCB1	NM_003073.3	24133954	24134064
SMARCB1	NM_003073.3	24143201	24143273
SMARCB1	NM_003073.3	24145478	24145598
SMARCB1	NM_003073.3	24176323	24176372
SM0	NM_005631.4	128845064	128845188

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Gene	GenBank Accession Number	Nucleotide Start*	Nucleotide End
SMO	NM_005631.4	128845986	128846063
SMO	NM_005631.4	128846338	128846419
SMO	NM_005631.4	128850270	128850363
SMO	NM_005631.4	128851500	128851612
SRC	NM_005417.3	36031667	36031769
STK11	NM_000455.4	1206978	1207104
STK11	NM_000455.4	1220367	1220450
STK11	NM_000455.4	1220481	1220509
STK11	NM_000455.4	1220575	1220603
STK11	NM_000455.4	1221237	1221332
STK11	NM_000455.4	1223015	1223144
TP53	NM_000546.5	7573924	7574035
TP53	NM_000546.5	7577016	7577151
TP53	NM_000546.5	7577509	7577612
TP53	NM_000546.5	7578181	7578294
TP53	NM_000546.5	7578366	7578483
TP53	NM_000546.5	7578517	7578559
TP53	NM_000546.5	7579351	7579485
TP53	NM_000546.5	7579854	7579917
VHL	NM_000551.3	10183766	10183854
VHL	NM_000551.3	10188193	10188306
VHL	NM_000551.3	10191466	10191527

<sup>\*</sup>Nucleotides do not include primer regions.

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