Clinical Test Report : Oncomine™ Dx Target Test US

Patient ID:	Date Of Birth:	Date:

Sample Details

Cancer Type: **Non-small Cell Lung Cancer**

Accession Number:

Patient ID:

Date Of Birth:

Gender:

Sample Condition:

MRN:

%Necrosis:

Ordering Physician:

Physician Org:

Physician Phone:

Physician Fax:

Pathologist:

Pathology Lab Org:

Pathology Lab Phone:

Pathology Lab Fax:

Sample Type:

Sample ID:

Collection Date:

Receive Time:

%Cellularity:

Sample Source:

Reference Interval:

Results for Sequence Variations for Therapeutic Use

DNA Sequence Variants for Therapeutic Use

Note: Results for positive variants are listed first to provide therapy information, followed by variants with negative results, followed by variants that were reported as no calls.

Gene	Display Name	Amino Acid Change	Nucleotide Change	Test Result	Hotspot ID	Associated Therapy
BRAF	BRAF V600E	p.Val600Glu	c.1799T>A	**POSITIVE**	COSM476	Tafinlar+Mekinist® (dabrafenib in combination with trametinib)
BRAF	BRAF V600E	p.Val600Glu	c.1799_1800delTGinsAA	**NEGATIVE**	COSM475	None Indicated
EGFR	EGFR Exon 19 deletion	p.Glu746_Ala750del	c.2235_2249delGGAATTAAGAGAAGC	**NEGATIVE**	COSM6223	None Indicated
EGFR	EGFR Exon 19 deletion	p.Glu746_Ala750del	c.2236_2250delGAATTAAGAGAAGCA	**NEGATIVE**	COSM6225	None Indicated
EGFR	EGFR Exon 19 deletion	p.Glu746_Arg748del	c.2239_2247delTTAAGAGAA	**NEGATIVE**	COSM6218	None Indicated
EGFR	EGFR Exon 19 deletion	p.Glu746_Glu749del	c.2235_2246delGGAATTAAGAGA	**NEGATIVE**	COSM28517	None Indicated
EGFR	EGFR Exon 19 deletion	p.Glu746_Ser752delinsAsp	c.2238_2255delATTAAGAGAAGCAACATC	**NEGATIVE**	COSM6220	None Indicated
EGFR	EGFR Exon 19 deletion	p.Glu746_Ser752delinsVal	c.2237_2255delAATTAAGAGAAGCAACATCirT	**NEGATIVE**	COSM12384	None Indicated
EGFR	EGFR Exon 19 deletion	p.Glu746_Thr751del	c.2236_2253delGAATTAAGAGAAGCAACA	**NEGATIVE**	COSM12728	None Indicated
EGFR	EGFR Exon 19 deletion	p.Glu746_Thr751delinsAla	c.2237_2251delAATTAAGAGAAGCAA	**NEGATIVE**	COSM12678	None Indicated
EGFR	EGFR Exon 19 deletion	p.Glu746_Thr751delinsIle	c.2235_2252delGGAATTAAGAGAAGCAACinsAT	**NEGATIVE**	COSM13551	None Indicated
EGFR	EGFR Exon 19 deletion	p.Glu746_Thr751delinsValAla	c.2237_2253delAATTAAGAGAAGCAACAinsTGCT	**NEGATIVE**	COSM12416	None Indicated
EGFR	EGFR Exon 19 deletion	p.Leu747_Ala750delinsPro	c.2239_2248delTTAAGAGAAGinsC	**NEGATIVE**	COSM12382	None Indicated
EGFR	EGFR Exon 19 deletion	p.Leu747_Ala750delinsPro	c.2238_2248delATTAAGAGAAGinsGC	**NEGATIVE**	COSM12422	None Indicated
EGFR	EGFR Exon 19 deletion	p.Leu747_Pro753delinsGln	c.2239_2258delTTAAGAGAAGCAACATCTCCsCA	**NEGATIVE**	COSM12387	None Indicated

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Gene	Display Name	Amino Acid Change	Nucleotide Change	Test Result	Hotspot ID	Associated Therapy
EGFR	EGFR Exon 19 deletion	p.Leu747_Pro753delinsSer	c.2240_2257delTAAGAGAAGCAACATCTC	**NEGATIVE**	COSM12370	None Indicated
EGFR	EGFR Exon 19 deletion	p.Leu747_Ser752del	c.2239_2256delTTAAGAGAAGCAACATCT	**NEGATIVE**	COSM6255	None Indicated
EGFR	EGFR Exon 19 deletion	p.Leu747_Thr751del	c.2240_2254delTAAGAGAAGCAACAT	**NEGATIVE**	COSM12369	None Indicated
EGFR	EGFR Exon 19 deletion	p.Leu747_Thr751delinsGln	c.2238_2252delATTAAGAGAAGCAACinsGCA	**NEGATIVE**	COSM12419	None Indicated
EGFR	EGFR Exon 19 deletion	p.Leu747_Thr751delinsPro	c.2239_2251delTTAAGAGAAGCAAinsC	**NEGATIVE**	COSM12383	None Indicated
EGFR	EGFR Exon 19 deletion	p.Leu747_Thr751delinsSer	c.2240_2251delTAAGAGAAGCAA	**NEGATIVE**	COSM6210	None Indicated
EGFR	EGFR L858R	p.Leu858Arg	c.2573T>G	**NEGATIVE**	COSM6224	None Indicated
EGFR	EGFR Exon 19 deletion	p.Lys745_Ala750delinsThr	c.2234_2248delAGGAATTAAGAGAAG	**NEGATIVE**	COSM1190791	None Indicated
EGFR	EGFR Exon 19 deletion	p.Lys745_Glu749del	c.2233_2247delAAGGAATTAAGAGAA	**NEGATIVE**	COSM26038	None Indicated

Gene Fusions (RNA) for Therapeutic Use

Gene	Display Name	Test Result	Associated Therapy
ROS1	ROS1 Fusion	**ABSENT**	None Indicated

The following reference files are used:hg19, Oncomine™ Dx Target Panel US v1.8 Fusion Reference. Associated therapy is within Non-Small Cell Lung Carcinoma (NSCLC).

Results for Analytical Sequence Variations Detected

Analytical DNA Sequence Variants Detected

Gene	Amino Acid Change	Nucleotide Change	Test Result	Hotspot ID
EGFR	p.Arg108Gly	c.322A>G	**POSITIVE**	COSM1451536
EGFR	p.Leu861Arg	c.2582T>G	**POSITIVE**	COSM12374

Analytical Gene Fusions (RNA) Detected

Analytical RNA sequence variations are not included

WARNING :
The safe and effective use of the variants reported in the Analytical Sequence Variations Detected section has not been established for selecting therapy using this device.

The variants for KRAS(COSM512/p.Gly12Phe/c.34_35delGGinsTT and COSM516/p.Gly12Cys/c.34G>T), MET (COSM707/ p.Thr1010Ile/c.3029C>T) and PIK3CA (COSM754/p.Asn345Lys/c.1035T>A) have been analytically validated.

Performance of all other variants identified by the test, other than clinically validated therapeutic variants and analytically validated variants has not been directly demonstrated.

Note that the base change c.170A>T in MAP2K1 is not associated with COSMIC ID COSM1235478 in the COSMIC database, even though it has been given the Variant HotSpot ID COSM1235478 in the software, the actual base change for COSMIC ID COSM1235478 is c.171G>T in MAP2K1. This does not impact test results.

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Test Description

The Oncomine™ Dx Target Test is a qualitative *in vitro* diagnostic test that uses high throughput parallel sequencing technology. It is indicated to detect sequence variations (hotspot mutations, deletions, and fusions), in 23 cancer related genes on DNA and RNA isolated from Non Small Cell Lung Cancer (NSCLC), formalin fixed paraffin-embedded (FFPE) tissues.

Sequence variations in DNA for the following 23 genes are reported: AKT1, ALK, BRAF, CDK4, DDR2, EGFR, ERBB2, ERBB3, FGFR2, FGFR3, HRAS, KIT, KRAS, MAP2K1, MAP2K2, MET, MTOR, NRAS, PDGFRA, PIK3CA, RAF1, RET and ROS1.

Sequence variation in RNA for ROS1 gene is also reported

The device is also indicated as a companion diagnostic to identify:
ROS1 fusion positive NSCLC patients for treatment with XALKORI® (crizotinib)
BRAF V600E positive NSCLC patients for treatment with Tafinlar+Mekinist® (dabrafenib in combination with trametinib)
EGFR L858R and Exon 19 deletions positive NSCLC patients for treatment with IRESSA® (gefitinib)

The Oncomine™ Dx Target Test is intended for use on the Ion PGM™ Dx Instrument System and is intended for *in vitro* diagnostic use by trained personnel in a professional laboratory environment.

Clinical Test Report : Oncomine™ Dx Target Test US

Patient ID:	Date Of Birth:	Date:

Results for Analytical Sequence Variations Not Detected

Analytical DNA Sequence Variants Not Detected

Note: Results for negative variants are listed first, followed by variants that were reported as no calls.

Gene	Amino Acid Change	Nucleotide Change	Test Result	Hotspot ID
AKT1	p.Glu17Lys	c.49G>A	**NEGATIVE**	COSM33765
ALK	p.Arg1275Gln	c.3824G>A	**NEGATIVE**	COSM28056
ALK	p.Arg1275Leu	c.3824G>T	**NEGATIVE**	COSM28060
ALK	p.Cys1156Tyr	c.3467G>A	**NEGATIVE**	COSM99136
ALK	p.Gly1128Ala	c.3383G>C	**NEGATIVE**	COSM98475
ALK	p.Gly1202Arg	c.3604G>A	**NEGATIVE**	COSM144250
ALK	p.Ile1171Asn	c.3512T>A	**NEGATIVE**	COSM28498
ALK	p.Ile1171Thr	c.3512T>C	**NEGATIVE**	COSM4381100
ALK	p.Leu1152Arg	c.3455T>G	**NEGATIVE**	COSM97185
ALK	p.Leu1152Pro	c.3455T>C	**NEGATIVE**	COSM1407659
ALK	p.Leu1196Gln	c.3587T>A	**NEGATIVE**	COSM1169447
ALK	p.Leu1196Met	c.3586C>A	**NEGATIVE**	COSM99137
ALK	p.Phe1174Cys	c.3521T>G	**NEGATIVE**	COSM28059
ALK	p.Phe1174Ile	c.3520T>A	**NEGATIVE**	COSM28491
ALK	p.Phe1174Leu	c.3522C>G	**NEGATIVE**	COSM28061
ALK	p.Phe1174Leu	c.3522C>A	**NEGATIVE**	COSM28055
ALK	p.Phe1174Leu	c.3520T>C	**NEGATIVE**	COSM28057
ALK	p.Phe1174Ser	c.3521T>C	**NEGATIVE**	COSM53063
ALK	p.Phe1174Val	c.3520T>G	**NEGATIVE**	COSM28054
ALK	p.Phe1245Cys	c.3734T>G	**NEGATIVE**	COSM28500
ALK	p.Phe1245Ile	c.3733T>A	**NEGATIVE**	COSM28492
ALK	p.Phe1245Leu	c.3735C>G	**NEGATIVE**	COSM28062
ALK	p.Phe1245Leu	c.3735C>A	**NEGATIVE**	COSM28493
ALK	p.Phe1245Val	c.3733T>G	**NEGATIVE**	COSM28499
ALK	p.Ser1206Tyr	c.3617C>A	**NEGATIVE**	COSM144251
ALK	p.Val1180Leu	c.3538G>C	**NEGATIVE**	COSM4381101
BRAF	p.Asp594Asn	c.1780G>A	**NEGATIVE**	COSM27639
BRAF	p.Asp594Gly	c.1781A>G	**NEGATIVE**	COSM467
BRAF	p.Gly466Glu	c.1397G>A	**NEGATIVE**	COSM453
BRAF	p.Gly466Val	c.1397G>T	**NEGATIVE**	COSM451
BRAF	p.Gly469Ala	c.1406G>C	**NEGATIVE**	COSM460
BRAF	p.Gly469Arg	c.1405G>A	**NEGATIVE**	COSM457
BRAF	p.Gly469Val	c.1406G>T	**NEGATIVE**	COSM459
BRAF	p.Lys601Glu	c.1801A>G	**NEGATIVE**	COSM478
BRAF	p.Val600Arg	c.1798_1799delGTinsAG	**NEGATIVE**	COSM474
BRAF	p.Val600Lys	c.1798_1799delGTinsAA	**NEGATIVE**	COSM473
BRAF	p.Val600_Lys601delinsGlu	c.1799_1801delTGA	**NEGATIVE**	COSM1133
CDK4	p.Arg24Cys	c.70C>T	**NEGATIVE**	COSM1677139
CDK4	p.Arg24His	c.71G>A	**NEGATIVE**	COSM1989836
CDK4	p.Arg24Leu	c.71G>T	**NEGATIVE**	COSM363684
CDK4	p.Arg24Ser	c.70C>A	**NEGATIVE**	COSM3463914
CDK4	p.Lys22Arg	c.65A>G	**NEGATIVE**	COSM232013
CDK4	p.Lys22Gln	c.64A>C	**NEGATIVE**	OM3153

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Gene	Amino Acid Change	Nucleotide Change	Test Result	Hotspot ID
CDK4	p.Lys22Met	c.65A>T	**NEGATIVE**	COSM3463915
DDR2	p.Arg124Leu	c.371G>T	**NEGATIVE**	COSM400880
DDR2	p.Arg124Trp	c.370C>T	**NEGATIVE**	COSM4024594
EGFR	p.Ala289Asp	c.866C>A	**NEGATIVE**	COSM21685
EGFR	p.Ala289Thr	c.865G>A	**NEGATIVE**	COSM21686
EGFR	p.Ala289Val	c.866C>T	**NEGATIVE**	COSM21687
EGFR	p.Arg108Lys	c.323G>A	**NEGATIVE**	COSM21683
EGFR	p.Glu709Ala	c.2126A>C	**NEGATIVE**	COSM13427
EGFR	p.Glu709Gly	c.2126A>G	**NEGATIVE**	COSM13009
EGFR	p.Glu709Lys	c.2125G>A	**NEGATIVE**	COSM12988
EGFR	p.Glu709Val	c.2126A>T	**NEGATIVE**	COSM12371
EGFR	p.Gly598Ala	c.1793G>C	**NEGATIVE**	COSM3412196
EGFR	p.Gly598Val	c.1793G>T	**NEGATIVE**	COSM21690
EGFR	p.Gly719Ala	c.2156G>C	**NEGATIVE**	COSM6239
EGFR	p.Gly719Asp	c.2156G>A	**NEGATIVE**	COSM18425
EGFR	p.Gly719Cys	c.2155G>T	**NEGATIVE**	COSM6253
EGFR	p.Gly719Ser	c.2155G>A	**NEGATIVE**	COSM6252
EGFR	p.Leu858Met	c.2572C>A	**NEGATIVE**	COSM12366
EGFR	p.Leu861Gln	c.2582T>A	**NEGATIVE**	COSM6213
EGFR	p.Ser492Arg	c.1474A>C	**NEGATIVE**	COSM236671
EGFR	p.Ser492Arg	c.1476C>A	**NEGATIVE**	COSM236670
EGFR	p.Ser768Ile	c.2303G>T	**NEGATIVE**	COSM6241
ERBB2	p.Arg678Gln	c.2033G>A	**NEGATIVE**	COSM436498
ERBB2	p.Arg896Cys	c.2686C>T	**NEGATIVE**	COSM14066
ERBB2	p.Arg896His	c.2687G>A	**NEGATIVE**	COSM119971
ERBB2	p.Asp769His	c.2305G>C	**NEGATIVE**	COSM13170
ERBB2	p.Asp769Tyr	c.2305G>T	**NEGATIVE**	COSM1251412
ERBB2	p.Gly776Val	c.2327G>T	**NEGATIVE**	COSM18609
ERBB2	p.Leu755Met	c.2263T>A	**NEGATIVE**	COSM1205571
ERBB2	p.Leu755Pro	c.2263_2264delTTinsCC	**NEGATIVE**	COSM683
ERBB2	p.Ser310Phe	c.929C>T	**NEGATIVE**	COSM48358
ERBB2	p.Ser310Tyr	c.929C>A	**NEGATIVE**	COSM94225
ERBB2	p.Thr733Ile	c.2198C>T	**NEGATIVE**	COSM14059
ERBB2	p.Val777Leu	c.2329G>T	**NEGATIVE**	COSM14062
ERBB2	p.Val842Ile	c.2524G>A	**NEGATIVE**	COSM14065
ERBB3	p.Ala232Thr	c.694G>A	**NEGATIVE**	COSM4043440
ERBB3	p.Ala232Val	c.695C>T	**NEGATIVE**	COSM1242239
ERBB3	p.Asp297Tyr	c.889G>T	**NEGATIVE**	COSM160822
ERBB3	p.Asp297Val	c.890A>T	**NEGATIVE**	COSM941490
ERBB3	p.Glu332Lys	c.994G>A	**NEGATIVE**	COSM254677
ERBB3	p.Met60Arg	c.179T>G	**NEGATIVE**	COSM941484
ERBB3	p.Met60Leu	c.178A>T	**NEGATIVE**	COSM1606366
ERBB3	p.Met60Lys	c.179T>A	**NEGATIVE**	COSM254678
ERBB3	p.Met91Ile	c.273G>A	**NEGATIVE**	COSM122890
ERBB3	p.Met91Ile	c.273G>C	**NEGATIVE**	COSM1299636
ERBB3	p.Val104Leu	c.310G>C	**NEGATIVE**	COSM160824
ERBB3	p.Val104Leu	c.310G>T	**NEGATIVE**	COSM191840
ERBB3	p.Val104Met	c.310G>A	**NEGATIVE**	COSM172423
FGFR2	p.Ala314Asp	c.941C>A	**NEGATIVE**	COSM49171

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Gene	Amino Acid Change	Nucleotide Change	Test Result	Hotspot ID
FGFR2	p.Asn549His	c.1645A>C	**NEGATIVE**	COSM250083
FGFR2	p.Asn549Lys	c.1647T>G	**NEGATIVE**	COSM36902
FGFR2	p.Asn549Lys	c.1647T>A	**NEGATIVE**	COSM36912
FGFR2	p.Asn549Ser	c.1646A>G	**NEGATIVE**	COSM3665553
FGFR2	p.Cys382Arg	c.1144T>C	**NEGATIVE**	COSM36906
FGFR2	p.Cys382Tyr	c.1145G>A	**NEGATIVE**	COSM915493
FGFR2	p.Lys659Asn	c.1977G>T	**NEGATIVE**	COSM49173
FGFR2	p.Lys659Asn	c.1977G>C	**NEGATIVE**	COSM683054
FGFR2	p.Lys659Glu	c.1975A>G	**NEGATIVE**	COSM36909
FGFR2	p.Lys659Met	c.1976A>T	**NEGATIVE**	COSM49175
FGFR2	p.Pro253Arg	c.758C>G	**NEGATIVE**	COSM49170
FGFR2	p.Pro253Leu	c.758C>T	**NEGATIVE**	COSM537801
FGFR2	p.Ser252Trp	c.755C>G	**NEGATIVE**	COSM36903
FGFR2	p.Tyr375Cys	c.1124A>G	**NEGATIVE**	COSM36904
FGFR2	p.Tyr375His	c.1123T>C	**NEGATIVE**	COSM1560916
FGFR3	p.Arg248Cys	c.742C>T	**NEGATIVE**	COSM714
FGFR3	p.Gly697Cys	c.2089G>T	**NEGATIVE**	COSM24802
FGFR3	p.Lys650Asn	c.1950G>T	**NEGATIVE**	COSM1428730
FGFR3	p.Lys650Gln	c.1948A>C	**NEGATIVE**	COSM726
FGFR3	p.Lys650Glu	c.1948A>G	**NEGATIVE**	COSM719
FGFR3	p.Ser249Cys	c.746C>G	**NEGATIVE**	COSM715
HRAS	p.Gln61Arg	c.182A>G	**NEGATIVE**	COSM499
HRAS	p.Gln61His	c.183G>T	**NEGATIVE**	COSM502
HRAS	p.Gln61His	c.183G>C	**NEGATIVE**	COSM503
HRAS	p.Gln61Leu	c.182A>T	**NEGATIVE**	COSM498
HRAS	p.Gln61Lys	c.181C>A	**NEGATIVE**	COSM496
HRAS	p.Gln61Pro	c.182A>C	**NEGATIVE**	COSM500
HRAS	p.Gly12Ala	c.35G>C	**NEGATIVE**	COSM485
HRAS	p.Gly12Arg	c.34G>C	**NEGATIVE**	COSM482
HRAS	p.Gly12Asp	c.35G>A	**NEGATIVE**	COSM484
HRAS	p.Gly12Cys	c.34G>T	**NEGATIVE**	COSM481
HRAS	p.Gly12Ser	c.34G>A	**NEGATIVE**	COSM480
HRAS	p.Gly12Val	c.35G>T	**NEGATIVE**	COSM483
HRAS	p.Gly13Arg	c.37G>C	**NEGATIVE**	COSM486
HRAS	p.Gly13Asp	c.38G>A	**NEGATIVE**	COSM490
HRAS	p.Gly13Cys	c.37G>T	**NEGATIVE**	COSM488
HRAS	p.Gly13Ser	c.37G>A	**NEGATIVE**	COSM487
HRAS	p.Gly13Val	c.38G>T	**NEGATIVE**	COSM489
KIT	p.Asn822Lys	c.2466T>A	**NEGATIVE**	COSM1321
KIT	p.Asn822Lys	c.2466T>G	**NEGATIVE**	COSM1322
KIT	p.Asp419_Arg420del	c.1255_1260delGACAGG	**NEGATIVE**	COSM1578132
KIT	p.Asp419del	c.1255_1257delGAC	**NEGATIVE**	COSM29014
KIT	p.Asp579del	c.1735_1737delGAT	**NEGATIVE**	COSM1294
KIT	p.Asp816His	c.2446G>C	**NEGATIVE**	COSM1311
KIT	p.Asp816Tyr	c.2446G>T	**NEGATIVE**	COSM1310
KIT	p.Asp816Val	c.2447A>T	**NEGATIVE**	COSM1314
KIT	p.Leu576Pro	c.1727T>C	**NEGATIVE**	COSM1290
KIT	p.Lys642Glu	c.1924A>G	**NEGATIVE**	COSM1304
KIT	p.Trp557Arg	c.1669T>A	**NEGATIVE**	COSM1216

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KIT	p.Trp557Arg	c.1669T>C	**NEGATIVE**	COSM1219
KIT	p.Trp557Gly	c.1669T>G	**NEGATIVE**	COSM1221
KIT	p.Trp557_Lys558del	c.1669_1674delTGGAAG	**NEGATIVE**	COSM1217
KIT	p.Trp557_Val559delinsPhe	c.1670_1675delGGAAGG	**NEGATIVE**	COSM1226
KIT	p.Val559Ala	c.1676T>C	**NEGATIVE**	COSM1255
KIT	p.Val559Asp	c.1676T>A	**NEGATIVE**	COSM1252
KIT	p.Val559Gly	c.1676T>G	**NEGATIVE**	COSM1253
KIT	p.Val559del	c.1679_1681delTTG	**NEGATIVE**	COSM1247
KIT	p.Val560Asp	c.1679T>A	**NEGATIVE**	COSM1257
KIT	p.Val654Ala	c.1961T>C	**NEGATIVE**	COSM12706
KIT	p.Val825Ala	c.2474T>C	**NEGATIVE**	COSM1323
KRAS	p.Ala146Pro	c.436G>C	**NEGATIVE**	COSM19905
KRAS	p.Ala146Thr	c.436G>A	**NEGATIVE**	COSM19404
KRAS	p.Ala146Val	c.437C>T	**NEGATIVE**	COSM19900
KRAS	p.Ala59Glu	c.176C>A	**NEGATIVE**	COSM547
KRAS	p.Ala59Gly	c.176C>G	**NEGATIVE**	COSM28518
KRAS	p.Ala59Thr	c.175G>A	**NEGATIVE**	COSM546
KRAS	p.Gln61Arg	c.182A>G	**NEGATIVE**	COSM552
KRAS	p.Gln61Glu	c.181C>G	**NEGATIVE**	COSM550
KRAS	p.Gln61His	c.183A>T	**NEGATIVE**	COSM555
KRAS	p.Gln61His	c.183A>C	**NEGATIVE**	COSM554
KRAS	p.Gln61Leu	c.182A>T	**NEGATIVE**	COSM553
KRAS	p.Gln61Lys	c.181C>A	**NEGATIVE**	COSM549
KRAS	p.Gln61Lys	c.180_181delTCinsAA	**NEGATIVE**	COSM87298
KRAS	p.Gln61Pro	c.182A>C	**NEGATIVE**	COSM551
KRAS	p.Gly12Ala	c.35G>C	**NEGATIVE**	COSM522
KRAS	p.Gly12Arg	c.34G>C	**NEGATIVE**	COSM518
KRAS	p.Gly12Asp	c.35G>A	**NEGATIVE**	COSM521
KRAS	p.Gly12Cys	c.34G>T	**NEGATIVE**	COSM516
KRAS	p.Gly12Phe	c.34_35delGGinsTT	**NEGATIVE**	COSM512
KRAS	p.Gly12Ser	c.34G>A	**NEGATIVE**	COSM517
KRAS	p.Gly12Val	c.35G>T	**NEGATIVE**	COSM520
KRAS	p.Gly13Ala	c.38G>C	**NEGATIVE**	COSM533
KRAS	p.Gly13Arg	c.37G>C	**NEGATIVE**	COSM529
KRAS	p.Gly13Asp	c.38_39delGCinsAT	**NEGATIVE**	COSM531
KRAS	p.Gly13Asp	c.38G>A	**NEGATIVE**	COSM532
KRAS	p.Gly13Cys	c.37G>T	**NEGATIVE**	COSM527
KRAS	p.Gly13Ser	c.37G>A	**NEGATIVE**	COSM528
KRAS	p.Gly13Val	c.38G>T	**NEGATIVE**	COSM534
KRAS	p.Lys117Asn	c.351A>T	**NEGATIVE**	COSM28519
KRAS	p.Lys117Asn	c.351A>C	**NEGATIVE**	COSM19940
MAP2K1	p.Glu203Lys	c.607G>A	**NEGATIVE**	COSM232755
MAP2K1	p.Glu203Val	c.608A>T	**NEGATIVE**	COSM3386991
MAP2K1	p.Lys57Asn	c.171G>C	**NEGATIVE**	OM3156
MAP2K1	p.Lys57Asn	c.171G>T	**NEGATIVE**	OM3157
MAP2K1	p.Lys57Met	c.170A>T	**NEGATIVE**	COSM1235478
MAP2K1	p.Lys57Thr	c.170A>C	**NEGATIVE**	OM3155
MAP2K1	p.Phe53Ile	c.157T>A	**NEGATIVE**	COSM3503329
MAP2K1	p.Phe53Leu	c.157T>C	**NEGATIVE**	COSM555604

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Clinical Test Report : Oncomine™ Dx Target Test US

Patient ID: Date Of Birth: Date:

Gene	Amino Acid Change	Nucleotide Change	Test Result	Hotspot ID
MAP2K1	p.Phe53Leu	c.159T>A	**NEGATIVE**	COSM1725008
MAP2K1	p.Phe53Leu	c.159T>G	**NEGATIVE**	OM3154
MAP2K1	p.Phe53Val	c.157T>G	**NEGATIVE**	COSM1562837
MAP2K1	p.Pro124Gln	c.371C>A	**NEGATIVE**	COSM1167912
MAP2K1	p.Pro124Leu	c.371C>T	**NEGATIVE**	COSM1315861
MAP2K1	p.Pro124Ser	c.370C>T	**NEGATIVE**	COSM235614
MAP2K2	p.Gln60Pro	c.179A>C	**NEGATIVE**	COSM145610
MAP2K2	p.Phe57Leu	c.171T>G	**NEGATIVE**	OM3158
MAP2K2	p.Phe57Leu	c.171T>A	**NEGATIVE**	COSM3389034
MAP2K2	p.Phe57Leu	c.169T>C	**NEGATIVE**	COSM1235618
MAP2K2	p.Phe57Val	c.169T>G	**NEGATIVE**	COSM3534171
MET	NA	NA	**NEGATIVE**	COSM29633
MET	NA	NA	**NEGATIVE**	COSM24687
MET	NA	NA	**NEGATIVE**	COSM35468
MET	p.His1112Arg	c.3335A>G	**NEGATIVE**	COSM703
MET	p.His1112Leu	c.3335A>T	**NEGATIVE**	COSM698
MET	p.His1112Tyr	c.3334C>T	**NEGATIVE**	COSM696
MET	p.Met1268Ile	c.3804G>A	**NEGATIVE**	COSM694
MET	p.Met1268Thr	c.3803T>C	**NEGATIVE**	COSM691
MET	p.Thr1010Ile	c.3029C>T	**NEGATIVE**	COSM707
MET	p.Tyr1021Asn	c.3061T>A	**NEGATIVE**	COSM48564
MET	p.Tyr1021Phe	c.3062A>T	**NEGATIVE**	COSM339515
MET	p.Tyr1248Cys	c.3743A>G	**NEGATIVE**	COSM699
MET	p.Tyr1248His	c.3742T>C	**NEGATIVE**	COSM690
MET	p.Tyr1253Asp	c.3757T>G	**NEGATIVE**	COSM700
MTOR	p.Cys1483Arg	c.4447T>C	**NEGATIVE**	COSM3747775
MTOR	p.Cys1483Phe	c.4448G>T	**NEGATIVE**	COSM462616
MTOR	p.Cys1483Trp	c.4449C>G	**NEGATIVE**	OM3149
MTOR	p.Cys1483Tyr	c.4448G>A	**NEGATIVE**	COSM462615
MTOR	p.Glu1799Lys	c.5395G>A	**NEGATIVE**	COSM180789
MTOR	p.Leu2427Arg	c.7280T>G	**NEGATIVE**	OM3148
MTOR	p.Leu2427Gln	c.7280T>A	**NEGATIVE**	COSM1185313
MTOR	p.Phe1888Ile	c.5662T>A	**NEGATIVE**	COSM3358968
MTOR	p.Phe1888Leu	c.5664C>G	**NEGATIVE**	COSM462604
MTOR	p.Phe1888Leu	c.5664C>A	**NEGATIVE**	COSM893813
MTOR	p.Phe1888Leu	c.5662T>C	**NEGATIVE**	COSM3358967
MTOR	p.Phe1888Val	c.5662T>G	**NEGATIVE**	COSM893814
MTOR	p.Ser2215Phe	c.6644C>T	**NEGATIVE**	COSM1686998
MTOR	p.Ser2215Pro	c.6643T>C	**NEGATIVE**	COSM1560108
MTOR	p.Ser2215Tyr	c.6644C>A	**NEGATIVE**	COSM20417
MTOR	p.Thr1977Arg	c.5930C>G	**NEGATIVE**	COSM462602
MTOR	p.Thr1977Lys	c.5930C>A	**NEGATIVE**	COSM462601
MTOR	p.Thr1977Ser	c.5929A>T	**NEGATIVE**	COSM1289945
MTOR	p.Val2006Ile	c.6016G>A	**NEGATIVE**	COSM893804
MTOR	p.Val2006Leu	c.6016G>C	**NEGATIVE**	COSM1134662
MTOR	p.Val2006Phe	c.6016G>T	**NEGATIVE**	COSM249481
NRAS	p.Ala146Thr	c.436G>A	**NEGATIVE**	COSM27174
NRAS	p.Ala146Val	c.437C>T	**NEGATIVE**	COSM4170228
NRAS	p.Ala59Thr	c.175G>A	**NEGATIVE**	COSM578

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Clinical Test Report : Oncomine™ Dx Target Test US v1.8

Patient ID: Date Of Birth: Date:

Gene	Amino Acid Change	Nucleotide Change	Test Result	Hotspot ID
NRAS	p.Gln61Arg	c.182A>G	**NEGATIVE**	COSM584
NRAS	p.Gln61Glu	c.181C>G	**NEGATIVE**	COSM581
NRAS	p.Gln61His	c.183A>T	**NEGATIVE**	COSM585
NRAS	p.Gln61His	c.183A>C	**NEGATIVE**	COSM586
NRAS	p.Gln61Leu	c.182A>T	**NEGATIVE**	COSM583
NRAS	p.Gln61Lys	c.181C>A	**NEGATIVE**	COSM580
NRAS	p.Gln61Pro	c.182A>C	**NEGATIVE**	COSM582
NRAS	p.Gly12Ala	c.35G>C	**NEGATIVE**	COSM565
NRAS	p.Gly12Arg	c.34G>C	**NEGATIVE**	COSM561
NRAS	p.Gly12Asp	c.35G>A	**NEGATIVE**	COSM564
NRAS	p.Gly12Cys	c.34G>T	**NEGATIVE**	COSM562
NRAS	p.Gly12Ser	c.34G>A	**NEGATIVE**	COSM563
NRAS	p.Gly12Val	c.35G>T	**NEGATIVE**	COSM566
NRAS	p.Gly13Ala	c.38G>C	**NEGATIVE**	COSM575
NRAS	p.Gly13Arg	c.37G>C	**NEGATIVE**	COSM569
NRAS	p.Gly13Asp	c.38G>A	**NEGATIVE**	COSM573
NRAS	p.Gly13Cys	c.37G>T	**NEGATIVE**	COSM570
NRAS	p.Gly13Ser	c.37G>A	**NEGATIVE**	COSM571
NRAS	p.Gly13Val	c.38G>T	**NEGATIVE**	COSM574
NRAS	p.Lys117Asn	c.351G>T	**NEGATIVE**	MAN13
PDGFRA	p.Asn659Lys	c.1977C>A	**NEGATIVE**	COSM22415
PDGFRA	p.Asn659Lys	c.1977C>G	**NEGATIVE**	COSM22414
PDGFRA	p.Asn659Tyr	c.1975A>T	**NEGATIVE**	COSM22416
PDGFRA	p.Asp842Tyr	c.2524G>T	**NEGATIVE**	COSM12396
PDGFRA	p.Asp842Val	c.2525A>T	**NEGATIVE**	COSM736
PDGFRA	p.Asp842_His845del	c.2526_2537delCATCATGCATGA	**NEGATIVE**	COSM737
PDGFRA	p.Asp842_Met844del	c.2524_2532delGACATCATG	**NEGATIVE**	COSM12401
PDGFRA	p.Ile843_Asp846del	c.2527_2538delATCATGCATGAT	**NEGATIVE**	COSM12400
PDGFRA	p.Ile843_Ser847delinsThr	c.2528_2539delTCATGCATGATT	**NEGATIVE**	COSM12407
PDGFRA	p.Val561Asp	c.1682T>A	**NEGATIVE**	COSM739
PIK3CA	p.Arg108His	c.323G>A	**NEGATIVE**	COSM27497
PIK3CA	p.Arg38Cys	c.112C>T	**NEGATIVE**	COSM744
PIK3CA	p.Arg38Gly	c.112C>G	**NEGATIVE**	COSM40945
PIK3CA	p.Arg38His	c.113G>A	**NEGATIVE**	COSM745
PIK3CA	p.Arg38Ser	c.112C>A	**NEGATIVE**	COSM87310
PIK3CA	p.Arg88Gln	c.263G>A	**NEGATIVE**	COSM746
PIK3CA	p.Arg93Gln	c.278G>A	**NEGATIVE**	COSM86041
PIK3CA	p.Arg93Trp	c.277C>T	**NEGATIVE**	COSM27493
PIK3CA	p.Asn1044Lys	c.3132T>A	**NEGATIVE**	COSM12592
PIK3CA	p.Asn345Ile	c.1034A>T	**NEGATIVE**	COSM94978
PIK3CA	p.Asn345Lys	c.1035T>A	**NEGATIVE**	COSM754
PIK3CA	p.Cys378Arg	c.1132T>C	**NEGATIVE**	COSM756
PIK3CA	p.Cys378Phe	c.1133G>T	**NEGATIVE**	COSM21450
PIK3CA	p.Cys378Tyr	c.1133G>A	**NEGATIVE**	COSM1041478
PIK3CA	p.Cys420Arg	c.1258T>C	**NEGATIVE**	COSM757
PIK3CA	p.Cys901Arg	c.2701T>C	**NEGATIVE**	COSM1420899
PIK3CA	p.Cys901Phe	c.2702G>T	**NEGATIVE**	COSM769
PIK3CA	p.Cys901Tyr	c.2702G>A	**NEGATIVE**	COSM1420901
PIK3CA	p.Gln546Arg	c.1637A>G	**NEGATIVE**	COSM12459

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Clinical Test Report : Oncomine™ Dx Target Test US

Patient ID:	Date Of Birth:	Date:

Gene	Amino Acid Change	Nucleotide Change	Test Result	Hotspot ID
PIK3CA	p.Gln546Glu	c.1636C>G	**NEGATIVE**	COSM6147
PIK3CA	p.Gln546Lys	c.1636C>A	**NEGATIVE**	COSM766
PIK3CA	p.Gln546Pro	c.1637A>C	**NEGATIVE**	COSM767
PIK3CA	p.Glu365Gly	c.1094A>G	**NEGATIVE**	COSM1420797
PIK3CA	p.Glu365Val	c.1094A>T	**NEGATIVE**	COSM1484860
PIK3CA	p.Glu39Lys	c.115G>A	**NEGATIVE**	COSM30625
PIK3CA	p.Glu542Lys	c.1624G>A	**NEGATIVE**	COSM760
PIK3CA	p.Glu542Val	c.1625A>T	**NEGATIVE**	COSM762
PIK3CA	p.Glu545Ala	c.1634A>C	**NEGATIVE**	COSM12458
PIK3CA	p.Glu545Asp	c.1635G>C	**NEGATIVE**	COSM27374
PIK3CA	p.Glu545Asp	c.1635G>T	**NEGATIVE**	COSM765
PIK3CA	p.Glu545Gln	c.1633G>C	**NEGATIVE**	COSM27133
PIK3CA	p.Glu545Gly	c.1634A>G	**NEGATIVE**	COSM764
PIK3CA	p.Glu545Lys	c.1633G>A	**NEGATIVE**	COSM763
PIK3CA	p.Glu547Lys	c.1639G>A	**NEGATIVE**	COSM29315
PIK3CA	p.Glu726Gly	c.2177A>G	**NEGATIVE**	COSM1420887
PIK3CA	p.Glu726Lys	c.2176G>A	**NEGATIVE**	COSM87306
PIK3CA	p.Glu81Lys	c.241G>A	**NEGATIVE**	COSM27502
PIK3CA	p.Gly1049Arg	c.3145G>C	**NEGATIVE**	COSM12597
PIK3CA	p.Gly1049Ser	c.3145G>A	**NEGATIVE**	COSM777
PIK3CA	p.Gly106Val	c.317G>T	**NEGATIVE**	COSM748
PIK3CA	p.His1047Arg	c.3140A>G	**NEGATIVE**	COSM775
PIK3CA	p.His1047Leu	c.3140A>T	**NEGATIVE**	COSM776
PIK3CA	p.His1047Tyr	c.3139C>T	**NEGATIVE**	COSM774
PIK3CA	p.His701Arg	c.2102A>G	**NEGATIVE**	COSM1420881
PIK3CA	p.His701Pro	c.2102A>C	**NEGATIVE**	COSM778
PIK3CA	p.Lys111Glu	c.331A>G	**NEGATIVE**	COSM13570
PIK3CA	p.Met1043Ile	c.3129G>A	**NEGATIVE**	COSM29313
PIK3CA	p.Met1043Ile	c.3129G>T	**NEGATIVE**	COSM773
PIK3CA	p.Met1043Val	c.3127A>G	**NEGATIVE**	COSM12591
PIK3CA	p.Thr1025Ala	c.3073A>G	**NEGATIVE**	COSM771
PIK3CA	p.Tyr1021Cys	c.3062A>G	**NEGATIVE**	COSM12461
PIK3CA	p.Val344Ala	c.1031T>C	**NEGATIVE**	COSM86951
PIK3CA	p.Val344Gly	c.1031T>G	**NEGATIVE**	COSM22540
RAF1	p.Ser257Leu	c.770C>T	**NEGATIVE**	COSM181063
RAF1	p.Ser257Trp	c.770C>G	**NEGATIVE**	COSM581519
RAF1	p.Thr421Met	c.1262_1263delCCinsTG	**NEGATIVE**	MAN9
RET	p.Ala883Phe	c.2646_2648delAGCinsTTT	**NEGATIVE**	COSM981
RET	p.Ala883Ser	c.2647G>T	**NEGATIVE**	COSM133167
RET	p.Asp898_Glu901del	c.2694_2705delTGTTTATGAAGA	**NEGATIVE**	COSM962
RET	p.Cys618Arg	c.1852T>C	**NEGATIVE**	COSM29803
RET	p.Cys618Tyr	c.1853G>A	**NEGATIVE**	COSM980
RET	p.Cys620Arg	c.1858T>C	**NEGATIVE**	COSM29804
RET	p.Cys634Arg	c.1900T>C	**NEGATIVE**	COSM966
RET	p.Glu768Asp	c.2304G>C	**NEGATIVE**	COSM21338
RET	p.Glu768Gly	c.2303A>G	**NEGATIVE**	COSM1347811
RET	p.Met918Thr	c.2753T>C	**NEGATIVE**	COSM965
ROS1	p.Gly2032Arg	c.6094G>C	**NEGATIVE**	MAN11
ROS1	p.Gly2032Arg	c.6094G>A	**NEGATIVE**	MAN10

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Clinical Test Report : Oncomine™ Dx Target Test US

Patient ID:	Date Of Birth:	Date:

Gene	Amino Acid Change	Nucleotide Change	Test Result	Hotspot ID
ROS1	p.Leu1951Met	c.5851C>A	**NEGATIVE**	COSM1072521
KIT	p.Arg796Lys	c.2387G>A	**NO CALL**	COSM1600411
PIK3CA	p.Glu365Lys	c.1093G>A	**NO CALL**	COSM86044
PIK3CA	p.Pro539Arg	c.1616C>G	**NO CALL**	COSM759

Analytical Gene Fusions (RNA) Not Detected

Analytical RNA sequence variations are not included

Comments