

## OncoNext Liquid™ Colon

### Investigated genes

**AKT1, APC, BRAF, CTNNB1, EGFR, ERBB2, FBXW7, GNAS, KRAS, MAP2K1, NRAS, PIK3CA, SMAD4, TP53**

### Hotspot mutations detected by OncoNext Liquid™ Colon

GENE	MUTATION	COSMIC ID
AKT1	p.E17K REF=C	COSM33765
APC	p.R805Ter REF=C	COSM19058
APC	p.R876Ter REF=C	COSM18852
APC	p.Y935Ter REF=C	COSM19031
APC	p.R1114Ter REF=C	COSM13125
APC	p.S1234fs REF=CA	COSM41617
APC	p.Q1291Ter REF=C	COSM19072
APC	p.Q1294Ter REF=C	COSM18960
APC	p.Q1303Ter REF=C	COSM13728
APC	p.E1306Ter REF=G	COSM18760
APC	p.I1307fs REF=	COSM19203
APC	p.E1309fs REF=AAAAG	COSM18764
APC	p.E1309fs REF=	COSM18719
APC	p.E1309Ter REF=G	COSM18775
APC	p.E1309fs REF=AAAAG	COSM18701
APC	p.E1309fs REF=AAAGA	COSM13113
APC	p.G1312Ter REF=G	COSM18817
APC	p.E1353Ter REF=G	COSM19048
APC	p.P1361fs REF=CC	COSM41623
APC	p.Q1367Ter REF=C	COSM13121
APC	p.P1372fs REF=AA	COSM19033
APC	p.P1373fs REF=C	COSM41619
APC	p.Q1378Ter REF=C	COSM18862
APC	p.E1379Ter REF=G	COSM18834
APC	p.Q1406Ter REF=C	COSM19087
APC	p.E1408Ter REF=G	COSM18822
APC	p.S1411fs REF=T	COSM18948
APC	p.R1450Ter REF=C	COSM13127
APC	p.S1465fs REF=AG	COSM18873
APC	p.E1464fs REF=AGAG	COSM18838
APC	p.S1465fs REF=AG	COSM13864
APC	p.L1488fs REF=TATT	COSM41618
APC	p.F1491fs REF=T	COSM19054
APC	p.T1493fs REF=C	COSM18786
APC	p.T1556fs REF=	COSM19695, COSM18734; COSM19020; COSM18561
APC	chr5 112175951 112175952 SYS_ERR REF=A	SYS_ERR
APC	p.E1577Ter REF=G	COSM13123
BRAF	p.V600E REF=A	COSM476
BRAF	p.L597V REF=G	COSM470
BRAF	p.D594G REF=T	COSM467
CTNNB1	p.S33Y REF=C	COSM5673
CTNNB1	p.G34V REF=G	COSM5670

CTNNB1	p.T41A REF=A	COSM5664
CTNNB1	p.T41I REF=C	COSM5676
CTNNB1	p.S45P REF=T	COSM5663
CTNNB1	p.S45F REF=C	COSM5667
EGFR	p.R451C REF=C	NA
EGFR	p.S464L REF=C	NA
EGFR	p.G465R REF=G	COSM601581
EGFR	p.G465R REF=G	COSM601582
EGFR	p.G465R REF=G	COSM5253370
EGFR	p.G465E REF=G	NA
EGFR	p.K467T REF=A	NA
EGFR	p.L491M REF=A	NA
EGFR	p.S492R REF=A	COSM236671
EGFR	p.S492R REF=C	COSM236670
ERBB2	p.S310F REF=C	COSM48358
ERBB2	p.S310Y REF=C	COSM94225
ERBB2	p.L755M REF=T	COSM1205571
ERBB2	p.L755S REF=T	COSM14060
ERBB2	p.E770_A771insAYVM REF=	COSM20959
ERBB2	p.G776V REF=G	COSM18609
ERBB2	p.V777L REF=G	COSM14062
ERBB2	p.V842I REF=G	COSM14065
ERBB2	p.R896C REF=C	COSM14066
FBXW7	p.R689W REF=G	COSM27083
FBXW7	p.D600Y REF=C	COSM167304
FBXW7	p.S582L REF=G	COSM22979
FBXW7	p.W526R REF=A	COSM30599
FBXW7	p.R505C REF=G	COSM22975
FBXW7	p.R479Q REF=C	COSM22974
FBXW7	p.R465H REF=C	COSM22965
FBXW7	p.R465C REF=G	COSM22932
GNAS	p.R201C REF=C	COSM27887
GNAS	p.R201S REF=C	COSM27899
GNAS	p.R201H REF=G	COSM27895
GNAS	p.R201L REF=G	COSM99221
GNAS	p.Q227R REF=A	COSM27896
KRAS	p.A146T REF=C	COSM19404
KRAS	p.Q61H REF=T	COSM554
KRAS	p.Q61R REF=T	COSM552
KRAS	p.Q61L REF=T	COSM553
KRAS	p.G13D REF=C	COSM532
KRAS	p.G13C REF=C	COSM527
KRAS	p.G12A REF=C	COSM522
KRAS	p.G12D REF=C	COSM521
KRAS	p.G12V REF=C	COSM520
KRAS	p.G12F REF=CC	COSM512
KRAS	p.G12R REF=C	COSM518
KRAS	p.G12C REF=C	COSM516
KRAS	p.G12S REF=C	COSM517
MAP2K1	p.F53I REF=T	COSM3503329
MAP2K1	p.F53L REF=T	COSM555604
MAP2K1	p.F53C REF=T	COSM1562837
MAP2K1	p.F53L REF=T	COSM1725008
MAP2K1	p.Q56P REF=A	COSM1235481
MAP2K1	p.K57Q REF=A	OM3155
MAP2K1	p.K57T REF=A	COSM4756761

MAP2K1	p.K57N REF=G	COSM1235478
MAP2K1	p.E203K REF=G	COSM232755
MAP2K1	p.E203V REF=A	COSM3386991
NRAS	p.Q61L REF=T	COSM583
NRAS	p.Q61R REF=T	COSM584
NRAS	p.Q61K REF=G	COSM580
NRAS	p.G13V REF=AC	COSM572
NRAS	p.G13V REF=C	COSM574
NRAS	p.G13A REF=C	COSM575
NRAS	p.G13D REF=C	COSM573
NRAS	p.G13Y REF=CC	COSM568
NRAS	p.G13N REF=CC	COSM24668
NRAS	p.G13S REF=C	COSM571
NRAS	p.G13R REF=C	COSM569
NRAS	p.G13C REF=C	COSM570
NRAS	p.G12E REF=AC	COSM144577
NRAS	p.G12V REF=C	COSM566
NRAS	p.G12D REF=C	COSM564
NRAS	p.G12A REF=C	COSM565
NRAS	p.G12P REF=CC	COSM559
NRAS	p.G12Y REF=CC	COSM560
NRAS	p.G12N REF=CC	COSM12723
NRAS	p.G12S REF=C	COSM563
NRAS	p.G12C REF=C	COSM562
NRAS	p.G12R REF=C	COSM561
PIK3CA	p.E542K REF=G	COSM760
PIK3CA	p.E545Q REF=G	COSM27133
PIK3CA	p.E545K REF=G	COSM763
PIK3CA	p.E545A REF=A	COSM12458
PIK3CA	p.E545G REF=A	COSM764
PIK3CA	p.Q546K REF=C	COSM766
PIK3CA	p.Q546R REF=A	COSM12459
PIK3CA	p.Q546P REF=A	COSM767
PIK3CA	p.M1043V REF=A	COSM12591
PIK3CA	p.M1043I REF=G	COSM773
PIK3CA	p.H1047Y REF=C	COSM774
PIK3CA	p.H1047R REF=A	COSM775
PIK3CA	p.H1047L REF=A	COSM776
PIK3CA	p.G1049R REF=G	COSM12597
SMAD4	p.A118V REF=C	COSM14215
SMAD4	p.E330A REF=A	COSM14110
SMAD4	p.D351G REF=A	COSM373800
SMAD4	p.P356L REF=C	COSM14049
SMAD4	p.R361C REF=C	COSM14140
SMAD4	p.R361H REF=G	COSM14122
SMAD4	p.G386D REF=G	COSM1150895
SMAD4	p.G510V REF=G	COSM1151558
TP53	p.E286G REF=T	COSM43565
TP53	p.E286K REF=C	COSM10726
TP53	p.E285K REF=C	COSM10722
TP53	p.R283P REF=C	COSM10743
TP53	p.R282W REF=G	COSM10704
TP53	p.R282G REF=G	COSM10992
TP53	p.R280I REF=C	COSM11287
TP53	p.R280K REF=C	COSM10728
TP53	p.R280T REF=C	COSM10724

TP53	p.G279E REF=C	COSM43714
TP53	p.P278R REF=G	COSM10887
TP53	p.P278L REF=G	COSM10863
TP53	p.P278A REF=G	COSM10814
TP53	p.P278S REF=G	COSM10939
TP53	p.P278T REF=G	COSM43697
TP53	p.C277F REF=C	COSM10749
TP53	p.C275Y REF=C	COSM10893
TP53	p.V274L REF=C	COSM44443
TP53	p.V274F REF=C	COSM10769
TP53	p.R273H REF=C	COSM10660
TP53	p.R273L REF=C	COSM10779
TP53	p.R273P REF=C	COSM43896
TP53	p.R273C REF=G	COSM10659
TP53	p.V272L REF=C	COSM10859
TP53	p.V272M REF=C	COSM10891
TP53	p.G266E REF=C	COSM10867
TP53	p.G266V REF=C	COSM10958
TP53	p.G266R REF=C	COSM10794
TP53	p.G262V REF=C	COSM11198
TP53	p.E258K REF=C	COSM10988
TP53	p.P250L REF=G	COSM10771
TP53	p.R249S REF=C	COSM10817
TP53	p.R249K REF=C	COSM44091
TP53	p.R249M REF=C	COSM43871
TP53	p.R248Q REF=C	COSM10662
TP53	p.R248L REF=C	COSM6549
TP53	p.R248W REF=G	COSM10656
TP53	p.M246V REF=T	COSM43555
TP53	p.G245D REF=C	COSM43606
TP53	p.G245V REF=C	COSM11196
TP53	p.G245S REF=C	COSM6932
TP53	p.G245C REF=C	COSM11081
TP53	p.G244D REF=C	COSM10883
TP53	p.G244V REF=C	COSM43652
TP53	p.G244C REF=C	COSM11524
TP53	p.G244S REF=C	COSM10941
TP53	p.C242F REF=C	COSM10810
TP53	p.C242Y REF=C	COSM10646
TP53	p.S241F REF=G	COSM10812
TP53	p.S240G REF=T	COSM43973
TP53	p.C238F REF=C	COSM43778
TP53	p.C238Y REF=C	COSM11059
TP53	p.M237I REF=C	COSM10834
TP53	p.Y234C REF=T	COSM10725
TP53	p.Y220C REF=T	COSM10758
TP53	p.Y220H REF=A	COSM44637
TP53	p.V216M REF=C	COSM10667
TP53	p.H214R REF=T	COSM43687
TP53	p.R213Q REF=C	COSM10735
TP53	p.R213L REF=C	COSM43650
TP53	p.V197M REF=C	COSM43779
TP53	p.I195T REF=A	COSM11089
TP53	p.L194R REF=A	COSM44571
TP53	p.H193R REF=T	COSM10742
TP53	p.H193Y REF=G	COSM10672

TP53	p.P191del REF=AGG	COSM44234
TP53	p.P190L REF=G	COSM43657
TP53	p.P177_C182del REF=GCAGCGCTCATGGTGGGG	COSM43570
TP53	p.H179R REF=T	COSM10889
TP53	p.H179L REF=T	COSM43635
TP53	p.H179Y REF=G	COSM10768
TP53	p.C176F REF=C	COSM10645
TP53	p.C176Y REF=C	COSM10687
TP53	p.R175H REF=C	COSM10648
TP53	p.R175L REF=C	COSM10718
TP53	p.R175C REF=G	COSM43680
TP53	p.V173L REF=C	COSM43559
TP53	p.V173M REF=C	COSM11084
TP53	p.V172F REF=C	COSM44240
TP53	p.R158L REF=C	COSM10714
TP53	p.R158H REF=C	COSM10690
TP53	p.V157F REF=C	COSM10670
TP53	p.R156P REF=C	COSM10760
TP53	p.G154V REF=C	COSM6815
TP53	p.P152L REF=G	COSM10790
TP53	p.P151H REF=G	COSM11476
TP53	p.P151S REF=G	COSM10905
TP53	p.P151T REF=G	COSM43911
TP53	p.L145P REF=A	COSM43899
TP53	p.C141Y REF=C	COSM43708
TP53	p.C141R REF=A	COSM43901
TP53	p.A138V REF=G	COSM43818
TP53	p.C135W REF=G	COSM44219
TP53	p.C135F REF=C	COSM10647
TP53	p.C135Y REF=C	COSM10801
TP53	p.K132R REF=T	COSM11582
TP53	p.K132E REF=T	COSM10813