

QIAseq Targeted RNA Panels

Mouse Cancer Transcriptome

Cat. no. 333002 RMM-003Z

For gene expression profiling by RNA sequencing with laboratory-verified primer sets

The Mouse Cancer Transcriptome QIAseq Targeted RNA Panel profiles the expression of 395 genes representative of 9 different biological pathways involved in transformation and tumorigenesis. During oncogenesis, gene mutations and related expression changes accumulate in pathways regulating specific aspects of cell growth. Biological pathways that, when deregulated, allow cells to grow and divide unchecked include apoptosis, cell cycle, DNA damage repair, cellular senescence and telomere maintenance. Changes in metabolism also occur as tumors grow, due in part to altered gene expression. Angiogenesis, another commonly affected pathway, allows further tumor growth via vascularization and oxygenation when stimulated by tumor cell hypoxia signaling. Epithelial-to-mesenchymal transition (EMT) facilitates tumor cell invasion and metastasis. The combination of differentially expressed genes in any given cancer or tumor can be distinctive. Understanding the molecular mechanisms behind specific cancers and researching diagnostic and prognostic biomarkers requires analyses of not just one of these pathways in isolation, but of all the pathways together, and results from this gene panel can suggest pathways that are potentially activated or inhibited in tumor cell samples for further follow-up studies. Using digital RNA sequencing, the expression of 395 genes with established roles in oncogenesis can be analyzed with this primer pool.

For further details, consult the *QIAseq Targeted RNA Panel Handbook*.

Panel is enough for 12 samples.

Shipping and storage

QIAseq Targeted RNA Panels are shipped in two boxes: box 1 of 2 is shipped on dry ice and box 2 of 2 is shipped on blue ice. For long-term storage, keep the contents of box 1 at -20°C and the contents of box 2 at 4°C . If stored under these conditions, the panels are stable for 8 months after receipt.

Note: Open the package and store the products appropriately immediately upon receipt.



Sample to Insight

Panel Contents

Contents	Volume
RNase-free water	1000 μ l
Control P2	12 μ l
Buffer GE	24 μ l
RE3 Reverse Transcriptase Mix	24 μ l
5x Buffer BC3	48 μ l
QIAseq RNA 5x Buffer	300 μ l
HotStarTaq DNA Polymerase (6U / μ l)	60 μ l
RS2 Primer (10 μ M)	20 μ l
BC Primer Mix	80 μ l
LA Primer Mix	80 μ l
QIAseq Beads	4 ml

Gene table: QIAseq Targeted RNA Panels

Gene symbol	Gene symbol	Gene symbol	Gene symbol
Abl1	Acd	Acly	Acsl4
Acvr1l	Adgrb1	Adm	Adora2b
Ahnak	Akt1	Aldoa	Aldob
Aldoc	Anapc2	Ang	Angpt1
Angpt2	Angptl4	Ankrd37	Anxa2
Apaf1	Apex1	Arnt	Atm
Atp5a1	Atp6v1g2	Atr	Atrx
Aurka	Aurkb	Bax	Bbc3
Bccip	Bcl2	Bcl2a1a	Bcl2a1b
Bcl2a1d	Bcl2l1	Bcl2l11	Bhlhe40
Birc2	Birc3	Birc5	Blm
Bmi1	Bmp1	Bnip3	Bnip3l
Brcal	Brca2	Brip1	Cald1
Camk2n1	Car9	Casp1	Casp2
Casp3	Casp6	Casp7	Casp9
Cav2	Ccl2	Ccna2	Ccnb1
Ccnb2	Ccnc	Ccnd1	Ccnd2
Ccnd3	Ccne1	Ccnf	Ccng1
Ccng2	Ccnh	Cent1	Cd40
Cd40lg	Cdc16	Cdc20	Cdc25a
Cdc25b	Cdc25c	Cdc34	Cdc6
Cdh1	Cdh2	Cdh5	Cdk1
Cdk2	Cdk4	Cdk5r1	Cdk5rap1
Cdk6	Cdk7	Cdk8	Cdkn1a
Cdkn1b	Cdkn2a	Cdkn2b	Cdkn2d
Cdkn3	Cflar	Chk1	Chk2

Gene symbol	Gene symbol	Gene symbol	Gene symbol
Cib1	Cks1b	Cks2	Col18a1
Col1a2	Col3a1	Col4a3	Col5a2
Cox5a	Cpt2	Ctgf	Ctsa
Cul1	Cul2	Cul3	Cxcl12
Cyld	Ddb1	Ddb2	Ddit4
Desi1	Dffa	Dkc1	Dll4
Dnajc5	Dsp	E2f1	E2f3
E2f4	Edn1	Efna1	Efnb2
Egf	Egr1	Eif4ebp1	Eng
Eno1	Eno2	Ephb4	Epo
Ercc1	Ercc2	Ercc3	Ercc4
Ercc5	Ercc6	Ercc8	Ets1
Ets2	Exo1	F3	Fam162a
Fas	Fasl	Fbp1	Fbp2
Fbrs1	Fen1	Fgf1	Fgf2
Fgfbp1	Figf	Flt1	Fn1
Foxc2	G6pc	G6pdx	Gadd45a
Gadd45g	Gar1	Gng11	Gpd2
Gpi1	Gsc	Gtse1	Hgf
Hif1a	Hk1	Hk2	Hk3
Hmox1	Hsp90aa1	Hus1	Id1
Ier3	Irfng	Igf1	Igf1r
Igfbp3	Igfbp4	Igfbp5	Igfbp7
Il1b	Il1rn	Il6	Ing1
Itga5	Itgav	Itgb3	Jag1
Jmjd6	Kdr	Kntc1	Kpna2
Krt14	Krt19	Ldha	Ldhb
Lep	Lgals3	Lig1	Lig3
Lig4	Lox	Lpl	Mad2l1
Mad2l2	Map2k1	Map2k3	Map3k1
Map3k2	Mcl1	Mcm2	Mcm3
Mcm4	Mcm5	Mdm2	Met
Mgmt	Mif	Mki67	Mlh1
Mlh3	Mmp14	Mmp2	Mmp3
Mmp9	Mms19	Mnat1	Mre11a
Msh2	Msh3	Msh6	Msn
Mst1r	Mtor	Mxi1	Nampt
Nbn	Ndrg1	Neil1	Neil3
Nhp2	Nol3	Nop10	Nos3
Notch4	Nrp1	Nrp2	Nthl1
Nudt13	Obfc1	Ocln	Odc1
P4ha1	Parp1	Parp2	Parp3
Pck1	Pck2	Pcx	Pdha1
Pdk1	Pdk2	Pdk3	Pdk4

Gene symbol	Gene symbol	Gene symbol	Gene symbol
Pf4	Pfkfb1	Pfkfb2	Pfkfb3
Pfkfb4	Pfkl	Pfkm	Pgam2
Pgf	Pgk1	Pgk2	Pgm1
Pim1	Pinx1	Pklr	Pkm
Plau	Plg	Plk1	Pms1
Pms2	Pnkp	Polb	Poll
Pot1a	Ppie	Ppil2	Ppp1r15a
Prkaa1	Prkab1	Prkdc	Ptges3
Ptgs2	Rad1	Rad17	Rad18
Rad21	Rad23a	Rad23b	Rad50
Rad51	Rad51b	Rad52	Rad54l
Rad9a	Rap1a	Rb1	Rbbp8
Rbl1	Rbl2	Rev1	Rfx1
Rgs2	Rif1	Rnf8	Rpa1
Rpa3	Rtel1	Runx2	Ruvbl2
Serpine2	Serpine1	Serpinf1	Sertad1
Sirt1	Sirt2	Sirt6	Skp2
Slc16a3	Slc2a1	Slc2a3	Slc2a4
Smug1	Snai1	Snai2	Snai3
Sox10	Sp1	Sparc	Spata2
Spp1	Steap1	Stk11	Stmn1
Syp2	Tbx2	Tcf4	Tek
Tep1	Terf1	Terf2	Terf2ip
Tert	Tfdp1	Tfdp2	Tfpi2
Tfrc	Tgfb1	Tgfb1	Thap3
Thbs1	Thbs2	Timp1	Timp2
Tinf2	Tmeff1	Tmem132a	Tnf
Tnfrsf10b	Tnfrsf11b	Tnfrsf1a	Tnks
Tnks2	Tpi1	Traf2	Trp53
Trp53bp1	Trp73	Tspan13	Twist1
Txnip	Ung	Uqcrfs1	Vcan
Vdac1	Vegfa	Vegfc	Vim
Vps13a	Wee1	Wnt5a	Wnt5b
Xab2	Xiap	Xpa	Xpc
Xrcc1	Xrcc2	Xrcc3	Xrcc4
Xrcc5	Xrcc6	Zbtb22	Zfp446
_GDC_CONTROL_MUS_01_	_GDC_CONTROL_MUS_02_	_GDC_CONTROL_MUS_03_	_GDC_CONTROL_MUS_08_
_GDC_CONTROL_MUS_09_			

Ordering Information

Product	Contents	Cat. no.
QIAseq Targeted RNA Panel (12)	Kit containing reagents for first strand synthesis, molecular barcoding, gene-specific amplification and QIAseq Beads for targeted RNA sequencing; fixed panel for 12 samples	333002
QIAseq Targeted RNA Panel (96)	Kit containing reagents for first strand synthesis, molecular barcoding, gene-specific amplification and QIAseq Beads for targeted RNA sequencing; fixed panel for 96 samples	333005
QIAseq Targeted RNA Extended Panel (12)	Kit containing reagents for first strand synthesis, molecular barcoding, gene-specific amplification and QIAseq Beads for targeted RNA sequencing; extended panel for 12 samples	333012
QIAseq Targeted RNA Extended Panel (96)	Kit containing reagents for first strand synthesis, molecular barcoding, gene-specific amplification and QIAseq Beads for targeted RNA sequencing; extended panel for 96 samples	333015
QIAseq Targeted RNA Custom Panel (12)	Kit containing reagents for first strand synthesis, molecular barcoding, gene-specific amplification and QIAseq Beads for targeted RNA sequencing; custom panel for 12 samples	333022
QIAseq Targeted RNA Custom Panel (96)	Kit containing reagents for first strand synthesis, molecular barcoding, gene-specific amplification and QIAseq Beads for targeted RNA sequencing; extended panel for 96 samples	333025
QIAseq Targeted RNA Custom Panel (384)	Kit containing reagents for first strand synthesis, molecular barcoding, gene-specific amplification and QIAseq Beads for targeted RNA sequencing; extended panel for 384 samples	333027
QIAseq Targeted RNA 12-index I (48)	Box containing oligos, enough for a total of 48 samples (for indexing up to 12 samples per run) and Custom Sequencing Primer for targeted RNA sequencing on Illumina platforms	333114
QIAseq Targeted RNA 96-index I (384)	Box containing oligos, enough for a total of 384 samples (for indexing up to 96 samples per run) and Custom Sequencing Primer for targeted RNA sequencing on Illumina platforms	333117
QIAseq Targeted RNA 96-index HT I (384)	Box containing oligos in arrays, enough for a total of 384 samples (for indexing up to 96 samples per	333127

Product	Contents	Cat. no.
	run) and Custom Sequencing Primer for targeted RNA sequencing on Illumina platforms	
QIAseq Targeted RNA 12-index L (48)	Box containing oligos, enough for a total of 48 samples (for indexing up to 12 samples per run) for targeted RNA sequencing on Ion Torrent platforms	333214
QIAseq Targeted RNA 96-index HT L (384)	Box containing oligos, enough for a total of 384 samples (for indexing up to 96 samples per run) for targeted RNA sequencing on Ion Torrent platforms	333217

QIAseq Targeted RNA Panels are intended for molecular biology applications. These products are not intended for the diagnosis, prevention or treatment of a disease.

For up-to-date licensing information and product-specific disclaimers, see the respective QIAGEN kit handbook or user manual. QIAGEN kit handbooks and user manuals are available at www.qiagen.com or can be requested from QIAGEN Technical Services or your local distributor.

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Sample to Insight