

QIAseq Targeted RNA Panels

Mouse Angiogenesis & Endothelial Cell Biology

Cat. no. 333002 RMM-001Z

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

The Mouse Angiogenesis & Endothelial Cell Biology QIAseq Targeted RNA Panel profiles the expression of 340 genes involved in angiogenesis and endothelial cell responses. In addition to its roles in normal development and physiological processes in adults such as wound healing and tissue regeneration, angiogenesis is a hallmark of many diseases including cancer, atherosclerosis and ischemia. Angiogenesis is commonly activated in response to hypoxia, which results in stabilization of hypoxia inducible factor (HIF) and upregulation of HIF target genes. Many hypoxia inducible genes have been identified that mediate multiple biological functions in addition to angiogenesis, such as hematopoiesis, proliferation and apoptosis, and metabolism. VEGF signaling is involved in normal developmental processes but is strongly upregulated under hypoxic conditions, and pathways downstream of VEGF modulate proliferation, apoptosis and migration of endothelial cells to effect sprouting angiogenesis, neovascularization and vascular remodeling. This gene panel contains growth factors, cytokines and chemokines, kinases, phosphatases and transcription factors with pro- or anti-angiogenic roles. Genes involved in other endothelial cell processes such as coagulation, inflammatory response, vasoconstriction and vasodilation are also present. Using digital RNA sequencing, the expression of a focused panel of genes involved in angiogenesis and endothelial cell biology 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
Ace	Acvr1	Adam17	Adams1
Adgrb1	Adipoq	Adm	Adora2b
Ager	Aggf1	Agt	Agtr1a
Agtr1b	Akt1	Akt2	Akt3
Aldoa	Aldoc	Alox5	Amot
Ang	Angpt1	Angpt2	Angptl1
Angptl3	Angptl4	Ankrd37	Anpep
Anxa2	Anxa5	Apex1	Apoe
App	Arnt	Atr	Bad
Bax	Bcl2	Bcl2l1	Bhlhe40
Blm	Bmp2	Bnip3	Bnip3l
Btg1	Calca	Car9	Casp1
Casp3	Casp9	Cav1	Ccl11
Ccl2	Ccl5	Ccng2	Cd55
Cd59a	Cd59b	Cdc42	Cdh5
Cflar	Cga	Chga	Cited1
Col18a1	Col4a3	Cops5	Cradd
Crhr2	Csf3	Ctgf	Ctsa
Cx3cl1	Cxcl1	Cxcl11	Cxcl12
Cxcl13	Cxcl14	Cxcl2	Cxcl3
Cxcl5	Cxcl9	Cxcr4	Cxcr5
Cyr61	Ddit4	Dll4	Dnajc5
Edil3	Edn1	Edn2	Ednra
Efna1	Efnb2	Egf	Egfl7
Egln1	Egln2	Egr1	Eif4ebp1
Eng	Eno1	Epas1	Epha2

Gene symbol	Gene symbol	Gene symbol	Gene symbol
Ephb4	Epo	Erap1	ErbB2
Ereg	Ero1l	F10	F2
F2r	F2rl1	F3	Fam162a
Fas	Fasl	Fbrsl1	Fgf1
Fgf13	Fgf2	Fgf6	Fgfbp1
Fgfr3	Figf	Flt1	Flt4
Fn1	Fos	Foxf1	Foxm1
Foxo4	Fst	Gbe1	Glmn
Gpi1	Grb2	Grn	Grp
Gys1	Hey1	Hey2	Hgf
Hif1a	Hif1an	Hif3a	Hk2
Hmgb1	Hnf4a	Hpse	Hras
Hsp90aa1	Hspb1	Icam1	Id1
Ier3	Ifnb1	Ifnb3	Igf1
Igfbp3	Il10	Il11	Il12a
Il12b	Il17f	Il18	Il1b
Il3	Il6	Il7	Itga5
Itgav	Itgb1	Itgb3	Jag1
Jmjd6	Kdr	Kit	Kitl
Kras	Ldha	Lect1	Lep
Lgals3	Lox	Map2k1	Map2k2
Map3k1	Map3k2	Mapk1	Mapk11
Mapk12	Mapk13	Mapk14	Mapk3
Mapkapk2	Mapkapk3	Mdk	Met
Mif	Mmp14	Mmp19	Mmp1a
Mmp1b	Mmp2	Mmp9	Mxi1
Myc	Myocd	Nampt	Ncoa1
NdrG1	Nfat5	Nfatc1	Nfatc2
Nfatc3	Nfatc4	Nfkb1	Nos3
Notch4	Nppb	Npr1	Nras
Nrp1	Nrp2	Ntrk2	Ocln
Odc1	P4ha1	P4hb	Pdgfa
Pdgfb	Pdgfc	Pdgfd	Pdgfra
Pdk1	Pecam1	Per1	Pf4
Pfkfb3	Pfkfb4	Pfkl	Pfkp
Pgam1	Pgf	Pgk1	Pik3ca
Pik3cb	Pik3cd	Pik3cg	Pik3r1
Pik3r2	Pik3r3	Pik3r5	Pim1
Pkm	Pla2g10	Pla2g12a	Pla2g12b
Pla2g1b	Pla2g2a	Pla2g2d	Pla2g2e
Pla2g2f	Pla2g3	Pla2g4a	Pla2g4b
Pla2g5	Pla2g6	Plat	Plau
Plcg1	Plcg2	Plg	Ppbb
Ppie	Ppil2	Ppp3ca	Ppp3cb

Gene symbol	Gene symbol	Gene symbol	Gene symbol
Ppp3cc	Ppp3r1	Ppp3r2	Prkca
Prkcb	Prkcg	Prl	Prl7d1
Procr	Prok1	Prok2	Pten
Ptgis	Ptgs1	Ptgs2	Ptik2
Ptn	Ptprj	Pxn	Qk
Rac1	Rac2	Raf1	Rasa1
Rbpj	Rfx1	Rhob	Rnase4
Rnh1	Runx1	Ruvbl2	S1pr1
Sele	Sell	Selp	Selplg
Sema3a	Sema3f	Serpinc1	Serpine1
Serpinf1	Sh2d2a	Shc2	Shh
Slc16a3	Slc2a1	Slc2a3	Slit2
Smad5	Smo	Sod1	Sphk1
Sphk2	Spink5	Src	Stab1
Stc1	Tbx1	Tdgf1	Tek
Tfpi	Tfrc	Tgfa	Tgfb1
Tgfb2	Tgfb3	Tgfr1	Tgfr2
Thap3	Thbd	Thbs1	Thbs2
Tie1	Timp1	Timp2	Timp3
Timp4	Tnf	Tnfsf10	Tnfsf12
Tnni2	Tnni3	Tpi1	Trp53
Txnip	Tymp	Usf2	Vash1
Vcam1	Vdac1	Vegfa	Vegfb
Vegfc	Vhl	Vwf	Wars2
Wt1	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