

QIAseq Targeted RNA Panels

Mouse Inflammation & Immunity Transcriptome

Cat. no. 333005 RMM-005Z-12

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

The Mouse Inflammation & Immunity Transcriptome QIAseq Targeted RNA Panel profiles the expression of 485 genes involved in regulating immune and inflammatory processes. The panel contains cytokines, chemokines, growth factors and their receptors, downstream signaling pathway genes and transcription factors involved in coordinating diverse functions of the immune system. Also present are toll-like receptor and associated adapter and downstream signaling genes involved in pathogen sensing. Interferons, interferon receptors and regulatory factors, and a variety of interferon response genes involved in host anti-viral defense are also present. Genes involved in specialized functions of the various immune cell types are also represented, such as antigen uptake and presentation by dendritic cells and antigen presenting cells, differentiation and activation of T and B cells and responses of cytotoxic and helper (Th1, Th2, Th17) T cells. Genes with pro- or anti-apoptotic effects in immune or targeted host cells are also included. Other genes in this panel regulate functions including innate and adaptive immunity, T cell anergy and immune tolerance, autoimmunity, acute phase response, complement activation and inflammation. Many of these genes are acutely upregulated due to cell damage, injury or infection to promote and eventually resolve the inflammatory response. Chronic inflammation, the expression of these cytokines and receptors at low levels over long periods of time, promotes various pathological conditions including allergies and asthma, cardiovascular system disorders such as atherosclerosis, central nervous system disorders such as Alzheimer's disease, fibrosis and rheumatoid arthritis. Using digital RNA sequencing, the expression of 485 genes with established roles in immune system processes can be analyzed with this primer pool.

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

Panel is enough for 96 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	96 μ l
Buffer GE	192 μ l
RE3 Reverse Transcriptase Mix	192 μ l
5x Buffer BC3	384 μ l
QIAseq RNA 5x Buffer	2400 μ l
HotStarTaq DNA Polymerase (6U / μ l)	480 μ l
RS2 Primer (10 μ M)	160 μ l
BC Primer Mix	640 μ l
LA Primer Mix	640 μ l
QIAseq Beads	32 ml

Gene table: QIAseq Targeted RNA Panels

Gene symbol	Gene symbol	Gene symbol	Gene symbol
Ackr2	Ackr3	Ackr4	Ada
Adar	Adipoq	Aicda	Aimp1
Apcs	Bcl2	Bcl2l1	Bcl6
Blnk	Bmp2	Bmp4	Bmp6
Bmp7	Bst2	Btk	Btla
C3	C3ar1	C5ar1	Casp1
Casp8	Cav1	Cblb	Ccl1
Ccl11	Ccl12	Ccl17	Ccl19
Ccl2	Ccl20	Ccl21a	Ccl22
Ccl24	Ccl25	Ccl26	Ccl27a
Ccl28	Ccl3	Ccl4	Ccl5
Ccl6	Ccl7	Ccl8	Ccl9
Ccr1	Ccr10	Ccr2	Ccr3
Ccr4	Ccr5	Ccr6	Ccr7
Ccr8	Ccr9	Ccr12	Cd14
Cd180	Cd1d1	Cd1d2	Cd2
Cd209a	Cd209b	Cd209c	Cd209d
Cd209e	Cd27	Cd274	Cd276
Cd28	Cd33	Cd34	Cd36
Cd38	Cd3d	Cd3e	Cd3g
Cd4	Cd40	Cd40lg	Cd44
Cd47	Cd48	Cd5	Cd69
Cd7	Cd70	Cd74	Cd79a
Cd80	Cd81	Cd86	Cd8a
Cdc42	Cdk2	Cdkn1a	Cdkn1b
Cebpa	Cebpb	Chuk	Ciita

Gene symbol	Gene symbol	Gene symbol	Gene symbol
Cklf	Clec4b2	Clec4e	Clec7a
Cmklr1	Cnfr	Crif2	Crp
Csf1	Csf1r	Csf2	Csf2ra
Csf3	Csf3r	Ctla4	Cx3cl1
Cx3cr1	Cxcl1	Cxcl10	Cxcl11
Cxcl12	Cxcl13	Cxcl14	Cxcl15
Cxcl16	Cxcl2	Cxcl3	Cxcl5
Cxcl9	Cxcr1	Cxcr2	Cxcr3
Cxcr4	Cxcr5	Cxcr6	Ddx58
Dgkz	Dpp4	Ebi3	Egf
Egfr	Egr1	Egr2	Egr3
Eif2ak2	Elk1	Eomes	Erbp2
F3	Fadd	Fas	Fasf
Fbrsl1	Fcer1a	Fcer2a	Fcgr1
Figf	Flt3	Flt3l	Fos
Fosl1	Foxp1	Foxp3	Fpr1
Gata3	Gbp2b	Gfi1	Gm10499
Gm8909	Gpi1	Gzma	Gzmb
H2-BI	H2-D1	H2-DMa	H2-K1
H2-M10.1	H2-M3	H2-Q1	H2-Q10
H2-Q2	H2-Q4	H2-Q6	H2-Q7
H2-T10	H2-T23	Havcr2	Hc
Hdac9	Hif1a	Hmgb1	Hspd1
Icam1	Icos	Id2	Ido1
Ifi204	Ifi27	Ifi2712a	Ifi30
Ifi35	Ifi44	Ifi44l	Ifih1
Ifit1	Ifit2	Ifit3	Ifitm1
Ifitm2	Ifitm3	Ifna14	Ifna16
Ifna2	Ifna4	Ifna5	Ifna6
Ifna7	Ifnar1	Ifnar2	Ifnb1
Ifne	Ifng	Ifngr1	Ifngr2
Ifnk	Ifnlr1	Igf1	Igsf6
Ikbkb	Il10	Il10ra	Il10rb
Il11	Il11ra1	Il12a	Il12b
Il12rb1	Il12rb2	Il13	Il13ra1
Il15	Il16	Il17a	Il17b
Il17f	Il17ra	Il17rb	Il17re
Il18	Il18r1	Il18rap	Il19
Il1a	Il1b	Il1r1	Il1r2
Il1rap	Il1rl1	Il1rn	Il2
Il20	Il20rb	Il21	Il21r
Il22	Il22ra2	Il23a	Il23r
Il24	Il25	Il27	Il27ra
Il2ra	Il2rb	Il2rg	Il3

Gene symbol	Gene symbol	Gene symbol	Gene symbol
Il31	Il31ra	Il33	Il3ra
Il4	Il4ra	Il5	Il5ra
Il6	Il6ra	Il7	Il7r
Il9	Il9r	Inha	Inhba
Irak1	Irak2	Irak4	Irf1
Irf2	Irf2bp1	Irf3	Irf4
Irf5	Irf6	Irf7	Irf8
Irf9	Irgm1	Irgm2	Isg15
Isg20	Itch	Itga1	Itgam
Itgb2	Jak1	Jak2	Jak3
Jun	Kif1	Kng1	Lag3
Lat	Lck	Lep	Lepr
Lgals3	Lif	Lrp1	Lta
Ltb	Ly86	Ly96	Lyn
Lyz1	Lyz2	Maf	Map2k3
Map3k1	Map3k2	Map3k7	Mapk1
Mapk8	Mbl2	Met	Mif
Mill2	Mmp3	Mmp9	Mpl
Mpo	Ms4a1	Mstn	Mx1
Mx2	Myc	Myd88	Nck1
Nfatc1	Nfatc2	Nfatc3	Nfkb1
Nfkb2	Nfkbia	Nfrkb	Nlrp3
Nmi	Nod1	Nod2	Nodal
Nos2	Notch1	Nr2c2	Nr3c1
Nr4a1	Nr4a3	Oas1a	Oas1g
Oas2	Osm	Pdcd1	Peli1
Pml	Pou2f2	Ppara	Pparg
Ppbp	Ppie	Ppil2	Prf1
Prkcg	Prkcz	Prkra	Psme1
Psme2	Ptger2	Ptger2	Ptgs2
Ptprc	Rac1	Rag1	Rel
Rela	Relb	Rfx1	Ripk2
Rnf128	Rora	Rorc	Runx1
Runx3	S1pr1	Sele	Sell
Sftpd	Sh2d1a	Sigirr	Slc11a1
Slit2	Socs1	Socs3	Socs5
Spp1	Stat1	Stat2	Stat3
Stat4	Stat5a	Stat6	Syk
Tap1	Tap2	Tapbp	Tbk1
Tbx21	Tgfa	Tgfb1	Tgfb2
Tgfb3	Thap3	Thbs1	Thpo
Ticam1	Ticam2	Timp1	Tirap
Tlr1	Tlr2	Tlr3	Tlr4
Tlr5	Tlr6	Tlr7	Tlr8

Gene symbol	Gene symbol	Gene symbol	Gene symbol
Tlr9	Tmem173	Tnf	Tnfrsf10b
Tnfrsf11b	Tnfrsf14	Tnfrsf18	Tnfrsf1a
Tnfrsf4	Tnfrsf8	Tnfrsf9	Tnfsf10
Tnfsf11	Tnfsf12	Tnfsf13	Tnfsf13b
Tnfsf14	Tnfsf4	Tnfsf8	Tollip
Traf3	Traf6	Trp53	Trp53inp1
Txlna	Tyk2	Tymp	Ube2n
Uts2	Vav1	Vcam1	Vegfa
Xcl1	Xcr1	Zbtb22	Zbtb7b
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.

Trademarks: QIAGEN® (QIAGEN Group)
1100785 02/2016 © 2016 QIAGEN, all rights reserved.

www.qiagen.com

Australia ■ 1-800-243-800
Austria ■ 0800/281010
Belgium ■ 0800-79612
Brazil ■ 0800-557779

Canada ■ 800-572-9613
China ■ 8621-3865-3865
Denmark ■ 80-885945
Finland ■ 0800-914416
France ■ 01-60-920-930
Germany ■ 02103-29-12000
Hong Kong ■ 800 933 965

Ireland ■ 1800 555 049
Italy ■ 800-787980
Japan ■ 03-6890-7300
Korea (South) ■ 080-000-7145
Luxembourg ■ 8002 2076
Mexico ■ 01-800-7742-436
The Netherlands ■ 0800 0229592

Norway ■ 800-18859
Singapore ■ 1800-742-4368
Spain ■ 91-630-7050
Sweden ■ 020-790282
Switzerland ■ 055-254-22-11
UK ■ 01293-422-911
USA ■ 800-426-8157



Sample to Insight