

RT² Profiler™ PCR Array:

Mouse Chemokines & Receptors

Catalog Number

PAMM-022A

PAMM-022C

PAMM-022D

PAMM-022E

PAMM-022F

PAMM-022G

For Real-Time Instruments:

ABI Standard Blocks; Bio-Rad iCycler, MyiQ, and (MJ Research) Chromo 4; and Stratagene Mx3005p, Mx3000p

ABI 7500 and 7900HT FAST 96-Well Blocks, ABI StepOnePlus

Bio-Rad (MJ Research) Opticon and Opticon 2, Stratagene Mx4000

ABI 7900HT 384-Well Block

Roche LightCycler 480 96-well Block

Roche LightCycler 480 384-well Block

Description

The Mouse Chemokines and Receptors RT² Profiler PCR Array profiles the expression of 84 genes that encode chemokines and their receptors. The array contains members of the C-C and C-X-C motif subfamilies of small inducible cytokines and their receptors as well as other related genes. Using real-time PCR, you can easily and reliably analyze expression of a focused panel of genes related to the immune system with this array.

Functional Gene Groupings

Chemokine (C-C motif) Ligands: Ccl1, Ccl11, Ccl12, Ccl17, Ccl19, Ccl2, Ccl20, Ccl4, Ccl5, Ccl6, Ccl7, Ccl8, Ccl9.

Chemokine (C-X-C motif) Ligands: Cxcl1, Cxcl10, Cxcl11, Cxcl12, Cxcl13, Cxcl15, Cxcl2, Cxcl4, Cxcl5, Pppb, Cxcl9.

Chemokine (C-C motif) Receptors: Ccr1, Ccr11, Ccr2, Ccr3, Ccr4, Ccr5, Ccr6, Ccr7, Ccr8, Ccr9, Ccr11, Ccr12.

Chemokine (C-X-C motif) Receptors: Blr1, Cxcr3, Cxcr4, Cxcr6.

Other Chemokines and Related Genes: Agtrl1, Bdnf, Bmp10, Bmp15, Bmp6, Ccbp2, Cmtm2a, Cmtm3, Cmtm4, Cmtm5, Cmtm6, Cmkrl1, Cxcr7, Csf1, Csf2, Cx3cl1, Cx3cr1, Ecgf1, Gdf5, Ccr10, Gpr81, Hif1a, Il13, Il16, Il18, Il1a, Il4, Il8ra, Il8rb, Inha, Inhbb, Lif, Ltb4r2, Mmp2, Mmp7, Myd88, Nfkb1, Rgs3, Slit2, Tlr4, Tnf, Tnfrsf1a, Tnfsf14, Trem1, Xcl1.

Storage Conditions

Please check the kit components immediately after you receive this package. We are only responsible for missing items reported within two (2) business days of receipt.

Storage Conditions: PCR Arrays are shipped at ambient temperature. Keep plates at -20 °C for long-term storage.

NOTE: Be sure that you have the correct PCR Array format for your instrument before starting the experiment.

References

1. Sallusto F, Mackay CR, Lanzavecchia A (2000) The Role Of Chemokine Receptors In Primary, Effector, and Memory Immune Responses. *Annu. Rev. Immunol* **18**: 593-620.
2. Rossi D, Zlotnik A (2000) The Biology Of Chemokines And Their Receptors. *Annu. Rev. Immunol* **18**: 217-242.
3. Zlotnik A, Yoshie O (2000) Chemokines: A New Classification System And Their Role In Immunity. *Immunity* **12**: 121-127.
4. Krishna Vaddi, Margaret Keller, Robert C. Newton, editors. (1997) *The Chemokine Facts Book*. Academic Press.
5. James J Campbell and Eugene C Butcher (2000) Chemokines In Tissue-Specific And Microenvironment-Specific Lymphocyte Homing. *Current Opinion in Immunology* **12**: 336-341.

Product Specification Sheet

Array Layout: Mouse Chemokines and Receptors PCR Array

	1	2	3	4	5	6	7	8	9	10	11	12
A	Agtr1	Bdnf	Blr1	Bmp10	Bmp15	Bmp6	Ccbp2	Ccl1	Ccl11	Ccl12	Ccl17	Ccl19
B	Ccl2	Ccl20	Ccl4	Ccl5	Ccl6	Ccl7	Ccl8	Ccl9	Ccr1	Ccr11	Ccr2	Ccr3
C	Ccr4	Ccr5	Ccr6	Ccr7	Ccr8	Ccr9	Ccr11	Ccr12	Cmtm2a	Cmtm3	Cmtm4	Cmtm5
D	Cmtm6	Cmklr1	Cxcr7	Csf1	Csf2	Cx3cl1	Cx3cr1	Cxcl1	Cxcl10	Cxcl11	Cxcl12	Cxcl13
E	Cxcl15	Cxcl2	Cxcl4	Cxcl5	Ppbp	Cxcl9	Cxcr3	Cxcr4	Cxcr6	Ecgf1	Gdf5	Ccr10
F	Gpr81	Hif1a	Il13	Il16	Il18	Il1a	Il4	Il8ra	Il8rb	Inha	Inhbb	Lif
G	Ltb4r2	Mmp2	Myd88	Nfkb1	Rgs3	Slit2	Tlr4	Tnf	Tnfrsf1a	Tnfsf14	Trem1	Xcl1
H	Gusb	Hprt1	Hsp90ab1	Gapdh	Actb	MGDC	RTC	RTC	RTC	PPC	PPC	PPC

Gene Table

Position	UniGene	GenBank	Symbol	Description
A01	Mm.29368	NM_011784	Agtr1	Angiotensin receptor-like 1
A02	Mm.1442	NM_007540	Bdnf	Brain derived neurotrophic factor
A03	Mm.6246	NM_007551	Blr1	Burkitt lymphoma receptor 1
A04	Mm.57171	NM_009756	Bmp10	Bone morphogenetic protein 10
A05	Mm.42160	NM_009757	Bmp15	Bone morphogenetic protein 15
A06	Mm.374781	NM_007556	Bmp6	Bone morphogenetic protein 6
A07	Mm.258105	NM_021609	Ccbp2	Chemokine binding protein 2
A08	Mm.1283	NM_011329	Ccl1	Chemokine (C-C motif) ligand 1
A09	Mm.4686	NM_011330	Ccl11	Small chemokine (C-C motif) ligand 11
A10	Mm.867	NM_011331	Ccl12	Chemokine (C-C motif) ligand 12
A11	Mm.41988	NM_011332	Ccl17	Chemokine (C-C motif) ligand 17
A12	Mm.379051	NM_011888	Ccl19	Chemokine (C-C motif) ligand 19
B01	Mm.290320	NM_011333	Ccl2	Chemokine (C-C motif) ligand 2
B02	Mm.116739	NM_016960	Ccl20	Chemokine (C-C motif) ligand 20
B03	Mm.244263	NM_013652	Ccl4	Chemokine (C-C motif) ligand 4
B04	Mm.284248	NM_013653	Ccl5	Chemokine (C-C motif) ligand 5
B05	Mm.137	NM_009139	Ccl6	Chemokine (C-C motif) ligand 6
B06	Mm.341574	NM_013654	Ccl7	Chemokine (C-C motif) ligand 7
B07	Mm.42029	NM_021443	Ccl8	Chemokine (C-C motif) ligand 8
B08	Mm.416125	NM_011338	Ccl9	Chemokine (C-C motif) ligand 9
B09	Mm.274927	NM_009912	Ccr1	Chemokine (C-C motif) receptor 1
B10	Mm.423532	NM_007718	Ccr11	Chemokine (C-C motif) receptor 1-like 1
B11	Mm.6272	NM_009915	Ccr2	Chemokine (C-C motif) receptor 2
B12	Mm.57050	NM_009914	Ccr3	Chemokine (C-C motif) receptor 3
C01	Mm.1337	NM_009916	Ccr4	Chemokine (C-C motif) receptor 4
C02	Mm.14302	NM_009917	Ccr5	Chemokine (C-C motif) receptor 5
C03	Mm.8007	NM_009835	Ccr6	Chemokine (C-C motif) receptor 6
C04	Mm.2932	NM_007719	Ccr7	Chemokine (C-C motif) receptor 7
C05	Mm.139129	NM_007720	Ccr8	Chemokine (C-C motif) receptor 8
C06	Mm.299367	NM_009913	Ccr9	Chemokine (C-C motif) receptor 9
C07	Mm.269254	NM_145700	Ccr11	Chemokine (C-C motif) receptor-like 1
C08	Mm.7336	NM_017466	Ccr12	Chemokine (C-C motif) receptor-like 2
C09	Mm.272746	NM_027022	Cmtm2a	CKLF-like MARVEL transmembrane domain containing 2A
C10	Mm.390108	NM_024217	Cmtm3	CKLF-like MARVEL transmembrane domain containing 3
C11	Mm.383258	NM_153582	Cmtm4	CKLF-like MARVEL transmembrane domain containing 4
C12	Mm.41614	NM_026066	Cmtm5	CKLF-like MARVEL transmembrane domain containing 5
D01	Mm.28858	NM_026036	Cmtm6	CKLF-like MARVEL transmembrane domain containing 6
D02	Mm.5196	NM_008153	Cmklr1	Chemokine-like receptor 1
D03	Mm.6522	NM_007722	Cxcr7	Chemokine (C-X-C motif) receptor 7

Product Specification Sheet

Position	UniGene	GenBank	Symbol	Description
D04	Mm.795	NM_007778	Csf1	Colony stimulating factor 1 (macrophage)
D05	Mm.4922	NM_009969	Csf2	Colony stimulating factor 2 (granulocyte-macrophage)
D06	Mm.103711	NM_009142	Cx3cl1	Chemokine (C-X3-C motif) ligand 1
D07	Mm.44065	NM_009987	Cx3cr1	Chemokine (C-X3-C) receptor 1
D08	Mm.21013	NM_008176	Cxcl1	Chemokine (C-X-C motif) ligand 1
D09	Mm.877	NM_021274	Cxcl10	Chemokine (C-X-C motif) ligand 10
D10	Mm.131723	NM_019494	Cxcl11	Chemokine (C-X-C motif) ligand 11
D11	Mm.303231	NM_021704	Cxcl12	Chemokine (C-X-C motif) ligand 12
D12	Mm.10116	NM_018866	Cxcl13	Chemokine (C-X-C motif) ligand 13
E01	Mm.64326	NM_011339	Cxcl15	Chemokine (C-X-C motif) ligand 15
E02	Mm.4979	NM_009140	Cxcl2	Chemokine (C-X-C motif) ligand 2
E03	Mm.332490	NM_019932	Cxcl4	Chemokine (C-X-C motif) ligand 4
E04	Mm.4660	NM_009141	Cxcl5	Chemokine (C-X-C motif) ligand 5
E05	Mm.293614	NM_023785	Pbbp	Pro-platelet basic protein
E06	Mm.766	NM_008599	Cxcl9	Chemokine (C-X-C motif) ligand 9
E07	Mm.12876	NM_009910	Cxcr3	Chemokine (C-X-C motif) receptor 3
E08	Mm.1401	NM_009911	Cxcr4	Chemokine (C-X-C motif) receptor 4
E09	Mm.124289	NM_030712	Cxcr6	Chemokine (C-X-C motif) receptor 6
E10	Mm.287977	NM_138302	Ecgf1	Endothelial cell growth factor 1 (platelet-derived)
E11	Mm.4744	NM_008109	Gdf5	Growth differentiation factor 5
E12	Mm.103813	XM_894898	Ccr10	Chemokine (C-C motif) receptor 10
F01	Mm.33362	NM_175520	Gpr81	G protein-coupled receptor 81
F02	Mm.3879	NM_010431	Hif1a	Hypoxia inducible factor 1, alpha subunit
F03	Mm.1284	NM_008355	Il13	Interleukin 13
F04	Mm.10137	NM_010551	Il16	Interleukin 16
F05	Mm.1410	NM_008360	Il18	Interleukin 18
F06	Mm.15534	NM_010554	Il1a	Interleukin 1 alpha
F07	Mm.276360	NM_021283	Il4	Interleukin 4
F08	Mm.337035	NM_178241	Il8ra	Interleukin 8 receptor, alpha
F09	Mm.234466	NM_009909	Il8rb	Interleukin 8 receptor, beta
F10	Mm.1100	NM_010564	Inha	Inhibin alpha
F11	Mm.3092	NM_008381	Inhbb	Inhibin beta-B
F12	Mm.4964	NM_008501	Lif	Leukemia inhibitory factor
G01	Mm.159670	NM_020490	Ltb4r2	Leukotriene B4 receptor 2
G02	Mm.29564	NM_008610	Mmp2	Matrix metalloproteinase 2
G03	Mm.213003	NM_010851	Myd88	Myeloid differentiation primary response gene 88
G04	Mm.256765	NM_008689	Nfkb1	Nuclear factor of kappa light chain gene enhancer in B-cells 1, p105
G05	Mm.286753	NM_019492	Rgs3	Regulator of G-protein signaling 3
G06	Mm.289739	NM_178804	Slit2	Slit homolog 2 (Drosophila)
G07	Mm.38049	NM_021297	Tlr4	Toll-like receptor 4
G08	Mm.1293	NM_013693	Tnf	Tumor necrosis factor
G09	Mm.1258	NM_011609	Tnfrsf1a	Tumor necrosis factor receptor superfamily, member 1a
G10	Mm.307668	NM_019418	Tnfsf14	Tumor necrosis factor (ligand) superfamily, member 14
G11	Mm.248352	NM_021406	Trem1	Triggering receptor expressed on myeloid cells 1
G12	Mm.190	NM_008510	Xcl1	Chemokine (C motif) ligand 1
H01	Mm.3317	NM_010368	Gusb	Glucuronidase, beta
H02	Mm.299381	NM_013556	Hprt1	Hypoxanthine guanine phosphoribosyl transferase 1
H03	Mm.2180	NM_008302	Hsp90ab1	Heat shock protein 90kDa alpha (cytosolic), class B member 1
H04	Mm.343110	NM_008084	Gapdh	Glyceraldehyde-3-phosphate dehydrogenase
H05	Mm.328431	NM_007393	Actb	Actin, beta, cytoplasmic
H06	N/A	X03556	MGDC	Mouse Genomic DNA Contamination
H07	N/A	SA_00104	RTC	Reverse Transcription Control
H08	N/A	SA_00104	RTC	Reverse Transcription Control
H09	N/A	SA_00104	RTC	Reverse Transcription Control
H10	N/A	SA_00103	PPC	Positive PCR Control
H11	N/A	SA_00103	PPC	Positive PCR Control
H12	N/A	SA_00103	PPC	Positive PCR Control