

Supplemental Table 1. The miRNA-Gene-Pathway enrichment results determined using the miRNApath package in R based on exosomal miRNAs. Pathways with an adjusted p-value < 0.02 are shown.

Pathway ID	Adjusted P-value	Pathway Name			
14	0.000999	<b>KEGG_PYRIMIDINE_METABOLISM</b>			
ASSAY ID	Entrez Gene ID	miRNA Name	miRNApath Score	miRNApath Rank	miRNA - Gene
41	CAD	mmu-miR-16*	114.00	114	mmu-miR-16* (CAD)
98	CAD	mmu-miR-2861	8.17	36	mmu-miR-2861 (CAD)
12	CDA	mmu-miR-103	697.00	697	mmu-miR-103 (CDA)
44	CMPK2	mmu-miR-181a	93.82	387	mmu-miR-181a (CMPK2)
45	CMPK2	mmu-miR-181b	94.17	397	mmu-miR-181b (CMPK2)
94	CMPK2	mmu-miR-24	519.00	519	mmu-miR-24 (CMPK2)
58	CTPS	mmu-miR-1931	8.05	39	mmu-miR-1931 (CTPS)
140	CTPS	mmu-miR-466g	22.81	101	mmu-miR-466g (CTPS)
94	DHODH	mmu-miR-24	494.00	494	mmu-miR-24 (DHODH)
195	DTYMK	mmu-miR-92a	559.50	559.5	mmu-miR-92a (DTYMK)
125	ENTPD3	mmu-miR-3473a	319.00	319	mmu-miR-3473a (ENTPD3)
180	ENTPD3	mmu-miR-705	23.24	138	mmu-miR-705 (ENTPD3)
45	ENTPD6	mmu-miR-181b	27.15	105	mmu-miR-181b (ENTPD6)
195	ITPA	mmu-miR-92a	369.00	369	mmu-miR-92a (ITPA)
41	NME3	mmu-miR-16*	213.50	213.5	mmu-miR-16* (NME3)
1	NME4	mmu-let-7a	12.52	35	mmu-let-7a (NME4)
3	NME4	mmu-let-7b	13.14	32	mmu-let-7b (NME4)
4	NME4	mmu-let-7c	13.01	37	mmu-let-7c (NME4)
6	NME4	mmu-let-7d	3.68	6	mmu-let-7d (NME4)
7	NME4	mmu-let-7e	13.23	39	mmu-let-7e (NME4)
10	NME4	mmu-let-7i	13.02	35	mmu-let-7i (NME4)
41	NME4	mmu-miR-16*	293.00	293	mmu-miR-16* (NME4)
189	NME4	mmu-miR-762	4.45	4	mmu-miR-762 (NME4)
1	NME6	mmu-let-7a	20.22	82	mmu-let-7a (NME6)
3	NME6	mmu-let-7b	22.34	97	mmu-let-7b (NME6)
4	NME6	mmu-let-7c	20.52	81	mmu-let-7c (NME6)
6	NME6	mmu-let-7d	6.31	21	mmu-let-7d (NME6)
7	NME6	mmu-let-7e	21.42	93	mmu-let-7e (NME6)
10	NME6	mmu-let-7i	16.39	54	mmu-let-7i (NME6)
94	NT5C1A	mmu-miR-24	123.50	123.5	mmu-miR-24 (NT5C1A)
122	NT5C3	mmu-miR-3470a	3.15	12	mmu-miR-3470a (NT5C3)
195	NT5M	mmu-miR-92a	459.00	459	mmu-miR-92a (NT5M)
94	POLA2	mmu-miR-24	127.50	127.5	mmu-miR-24 (POLA2)
73	POLD3	mmu-miR-19b	332.00	332	mmu-miR-19b (POLD3)

74	POLD3	mmu-miR-207	6.75	39	mmu-miR-207 (POLD3)
73	POLR1C	mmu-miR-19b	153.00	153	mmu-miR-19b (POLR1C)
12	POLR2A	mmu-miR-103	220.50	220.5	mmu-miR-103 (POLR2A)
41	POLR2B	mmu-miR-16*	114.00	114	mmu-miR-16* (POLR2B)
182	POLR2D	mmu-miR-709	27.14	166	mmu-miR-709 (POLR2D)
94	POLR2G	mmu-miR-24	20.50	20.5	mmu-miR-24 (POLR2G)
12	POLR2H	mmu-miR-103	626.50	626.5	mmu-miR-103 (POLR2H)
40	POLR2H	mmu-miR-15b	9.88	13	mmu-miR-15b (POLR2H)
73	POLR2L	mmu-miR-19b	509.50	509.5	mmu-miR-19b (POLR2L)
94	POLR2L	mmu-miR-24	324.00	324	mmu-miR-24 (POLR2L)
41	POLR3C	mmu-miR-16*	232.00	232	mmu-miR-16* (POLR3C)
12	POLR3D	mmu-miR-103	595.00	595	mmu-miR-103 (POLR3D)
41	POLR3D	mmu-miR-16*	119.00	119	mmu-miR-16* (POLR3D)
40	POLR3F	mmu-miR-15b	50.66	253	mmu-miR-15b (POLR3F)
42	POLR3F	mmu-miR-16	47.55	240	mmu-miR-16 (POLR3F)
75	POLR3G	mmu-miR-20a	43.81	195	mmu-miR-20a (POLR3G)
197	POLR3G	mmu-miR-93	41.21	183	mmu-miR-93 (POLR3G)
12	PRIM2	mmu-miR-103	35.00	35	mmu-miR-103 (PRIM2)
1	RRM2	mmu-let-7a	70.21	308	mmu-let-7a (RRM2)
3	RRM2	mmu-let-7b	70.15	313	mmu-let-7b (RRM2)
4	RRM2	mmu-let-7c	71.61	323	mmu-let-7c (RRM2)
7	RRM2	mmu-let-7e	62.88	289	mmu-let-7e (RRM2)
10	RRM2	mmu-let-7i	41.52	217	mmu-let-7i (RRM2)
13	RRM2	mmu-miR-106a	25.89	108	mmu-miR-106a (RRM2)
75	RRM2	mmu-miR-20a	118.61	456	mmu-miR-20a (RRM2)
197	RRM2	mmu-miR-93	79.13	362	mmu-miR-93 (RRM2)
125	TK1	mmu-miR-3473a	592.00	592	mmu-miR-3473a (TK1)
171	TK2	mmu-miR-671-5p	15.68	74	mmu-miR-671-5p (TK2)
24	TXNRD1	mmu-miR-125b-5p	85.04	311	mmu-miR-125b-5p (TXNRD1)
12	UCK2	mmu-miR-103	211.00	211	mmu-miR-103 (UCK2)
195	UPB1	mmu-miR-92a	646.00	646	mmu-miR-92a (UPB1)
30	UPP1	mmu-miR-138*	74.00	74	mmu-miR-138* (UPP1)
195	UPP2	mmu-miR-92a	410.00	410	mmu-miR-92a (UPP2)

Pathway ID	Adjusted P-value	Pathway Name			
433	0.000999	ST_TYPE_I_INTERFERON_PATHWAY			
ASSAY ID	Entrez Gene ID	miRNA Name	miRNApath Score	miRNApath Rank	miRNA - Gene
13	JAK1	mmu-miR-106a	14.51	57	mmu-miR-106a (JAK1)
43	JAK1	mmu-miR-17	42.24	185	mmu-miR-17 (JAK1)
75	JAK1	mmu-miR-20a	34.05	133	mmu-miR-20a (JAK1)
125	JAK1	mmu-miR-3473a	645.00	645	mmu-miR-3473a (JAK1)
1	PTPRU	mmu-let-7a	42.57	219	mmu-let-7a (PTPRU)
73	PTPRU	mmu-miR-19b	665.00	665	mmu-miR-19b (PTPRU)
1	TYK2	mmu-let-7a	8.27	12	mmu-let-7a (TYK2)
3	TYK2	mmu-let-7b	9.28	22	mmu-let-7b (TYK2)
4	TYK2	mmu-let-7c	8.28	13	mmu-let-7c (TYK2)
6	TYK2	mmu-let-7d	4.99	15	mmu-let-7d (TYK2)
7	TYK2	mmu-let-7e	7.03	15	mmu-let-7e (TYK2)
10	TYK2	mmu-let-7i	8.61	17	mmu-let-7i (TYK2)

Pathway ID	Adjusted P-value	Pathway Name			
675	0.000999	REACTOME_NEF_MEDIATED_DOWNREGULATION_OF_MHC_CLASS_I_COMPLEX_CELL_SURFACE_EXPRESSION			
ASSAY ID	Entrez Gene ID	miRNA Name	miRNApath Score	miRNApath Rank	miRNA - Gene
18	AP1G1	mmu-miR-1187	5.82	17	mmu-miR-1187 (AP1G1)
56	AP1G1	mmu-miR-191	2.81	20	mmu-miR-191 (AP1G1)
180	AP1G1	mmu-miR-705	4.49	4	mmu-miR-705 (AP1G1)
12	AP1M1	mmu-miR-103	564.00	564	mmu-miR-103 (AP1M1)
157	AP1M1	mmu-miR-574-5p	10.72	55	mmu-miR-574-5p (AP1M1)
189	AP1M1	mmu-miR-762	32.10	200	mmu-miR-762 (AP1M1)
94	AP1M2	mmu-miR-24	62.00	62	mmu-miR-24 (AP1M2)
171	AP1M2	mmu-miR-671-5p	12.09	51	mmu-miR-671-5p (AP1M2)
1	AP1S1	mmu-let-7a	18.75	70	mmu-let-7a (AP1S1)
3	AP1S1	mmu-let-7b	17.25	62	mmu-let-7b (AP1S1)
4	AP1S1	mmu-let-7c	18.42	66	mmu-let-7c (AP1S1)
6	AP1S1	mmu-let-7d	5.63	18	mmu-let-7d (AP1S1)
7	AP1S1	mmu-let-7e	16.74	58	mmu-let-7e (AP1S1)
10	AP1S1	mmu-let-7i	19.58	73	mmu-let-7i (AP1S1)
59	AP1S1	mmu-miR-1935	33.57	77	mmu-miR-1935 (AP1S1)
12	AP1S2	mmu-miR-103	702.00	702	mmu-miR-103 (AP1S2)
59	PACS1	mmu-miR-1935	39.22	91	mmu-miR-1935 (PACS1)
98	PACS1	mmu-miR-2861	7.98	33	mmu-miR-2861 (PACS1)
182	PACS1	mmu-miR-709	12.87	52	mmu-miR-709 (PACS1)

Pathway ID	Adjusted P-value	Pathway Name			
66	0.001998	KEGG_AMINOACYL_TRNA_BIOSYNTHESIS			
ASSAY ID	Entrez Gene ID	miRNA Name	miRNAscore	miRNArank	miRNA - Gene
195	AARS	mmu-miR-92a	671.00	671	mmu-miR-92a (AARS)
94	AARS2	mmu-miR-24	438.00	438	mmu-miR-24 (AARS2)
30	DARS	mmu-miR-138*	204.50	204.5	mmu-miR-138* (DARS)
73	DARS	mmu-miR-19b	215.00	215	mmu-miR-19b (DARS)
125	DARS	mmu-miR-3473a	102.00	102	mmu-miR-3473a (DARS)
94	DARS2	mmu-miR-24	489.00	489	mmu-miR-24 (DARS2)
162	HARS	mmu-miR-669b	14.39	83	mmu-miR-669b (HARS)
12	IARS	mmu-miR-103	352.00	352	mmu-miR-103 (IARS)
40	IARS	mmu-miR-15b	72.73	378	mmu-miR-15b (IARS)
103	IARS	mmu-miR-297a	4.63	20	mmu-miR-297a (IARS)
96	MTFMT	mmu-miR-26a	40.97	208	mmu-miR-26a (MTFMT)
73	NARS	mmu-miR-19b	227.00	227	mmu-miR-19b (NARS)
4	PARS2	mmu-let-7c	34.53	183	mmu-let-7c (PARS2)
7	PARS2	mmu-let-7e	44.95	235	mmu-let-7e (PARS2)
10	PARS2	mmu-let-7i	23.74	106	mmu-let-7i (PARS2)
1	QARS	mmu-let-7a	19.68	76	mmu-let-7a (QARS)
3	QARS	mmu-let-7b	19.26	75	mmu-let-7b (QARS)
4	QARS	mmu-let-7c	18.24	65	mmu-let-7c (QARS)
6	QARS	mmu-let-7d	9.01	45	mmu-let-7d (QARS)
7	QARS	mmu-let-7e	19.59	75	mmu-let-7e (QARS)
10	QARS	mmu-let-7i	36.10	195	mmu-let-7i (QARS)
41	RARS	mmu-miR-16*	91.50	91.5	mmu-miR-16* (RARS)
141	RARS	mmu-miR-466h	2.91	1	mmu-miR-466h (RARS)
94	SARS2	mmu-miR-24	612.50	612.5	mmu-miR-24 (SARS2)
12	TARS	mmu-miR-103	689.00	689	mmu-miR-103 (TARS)
30	TARS	mmu-miR-138*	118.00	118	mmu-miR-138* (TARS)
195	VARS2	mmu-miR-92a	23.50	23.5	mmu-miR-92a (VARS2)
24	WARS	mmu-miR-125b-5p	52.08	272	mmu-miR-125b-5p (WARS)
48	YARS	mmu-miR-1894-3p	4.90	20	mmu-miR-1894-3p (YARS)

Pathway ID	Adjusted P-value	Pathway Name			
283	0.001998	BIOCARTA_IL10_PATHWAY			
ASSAY ID	Entrez Gene ID	miRNA Name	miRNApath Score	miRNApath Rank	miRNA - Gene
94	HMOX1	mmu-miR-24	364.00	364	mmu-miR-24 (HMOX1)
3	IL10	mmu-let-7b	36.28	194	mmu-let-7b (IL10)
4	IL10	mmu-let-7c	46.41	249	mmu-let-7c (IL10)
19	IL10	mmu-miR-1195	0.87	4	mmu-miR-1195 (IL10)
44	IL1A	mmu-miR-181a	7.29	12	mmu-miR-181a (IL1A)
45	IL1A	mmu-miR-181b	9.38	17	mmu-miR-181b (IL1A)
1	IL6	mmu-let-7a	19.58	74	mmu-let-7a (IL6)
3	IL6	mmu-let-7b	28.65	141	mmu-let-7b (IL6)
4	IL6	mmu-let-7c	22.49	96	mmu-let-7c (IL6)
7	IL6	mmu-let-7e	19.62	78	mmu-let-7e (IL6)
10	IL6	mmu-let-7i	20.96	84	mmu-let-7i (IL6)
44	IL6	mmu-miR-181a	11.79	30	mmu-miR-181a (IL6)
45	IL6	mmu-miR-181b	11.04	22	mmu-miR-181b (IL6)
13	JAK1	mmu-miR-106a	14.51	57	mmu-miR-106a (JAK1)
43	JAK1	mmu-miR-17	42.24	185	mmu-miR-17 (JAK1)
75	JAK1	mmu-miR-20a	34.05	133	mmu-miR-20a (JAK1)
125	JAK1	mmu-miR-3473a	645.00	645	mmu-miR-3473a (JAK1)
43	STAT3	mmu-miR-17	49.66	233	mmu-miR-17 (STAT3)
75	STAT3	mmu-miR-20a	53.60	265	mmu-miR-20a (STAT3)
174	STAT3	mmu-miR-690	8.28	45	mmu-miR-690 (STAT3)
197	STAT3	mmu-miR-93	45.91	212	mmu-miR-93 (STAT3)
125	STAT5A	mmu-miR-3473a	132.00	132	mmu-miR-3473a (STAT5A)
59	STAT5B	mmu-miR-1935	35.26	79	mmu-miR-1935 (STAT5B)
73	STAT5B	mmu-miR-19b	646.00	646	mmu-miR-19b (STAT5B)
189	TNF	mmu-miR-762	39.09	236	mmu-miR-762 (TNF)
195	TNF	mmu-miR-92a	422.00	422	mmu-miR-92a (TNF)

Pathway ID	Adjusted P-value	Pathway Name			
730	0.001998	REACTOME_GLYCOSPHINGOLIPID_METABOLISM			
ASSAY ID	Entrez Gene ID	miRNA Name	miRNApath Score	miRNApath Rank	miRNA - Gene
94	ARSI	mmu-miR-24	342.00	342	mmu-miR-24 (ARSI)
44	ARSJ	mmu-miR-181a	41.17	182	mmu-miR-181a (ARSJ)
45	ARSJ	mmu-miR-181b	20.62	73	mmu-miR-181b (ARSJ)
195	ASAH1	mmu-miR-92a	130.50	130.5	mmu-miR-92a (ASAH1)
49	GAL3ST1	mmu-miR-1894-5p	11.09	54	mmu-miR-1894-5p (GAL3ST1)
171	GAL3ST1	mmu-miR-671-5p	3.64	7	mmu-miR-671-5p (GAL3ST1)
94	GBA2	mmu-miR-24	3.00	3	mmu-miR-24 (GBA2)
195	GLA	mmu-miR-92a	300.00	300	mmu-miR-92a (GLA)
94	GLB1	mmu-miR-24	15.00	15	mmu-miR-24 (GLB1)
94	HEXA	mmu-miR-24	230.00	230	mmu-miR-24 (HEXA)
94	NEU1	mmu-miR-24	650.00	650	mmu-miR-24 (NEU1)
171	NEU2	mmu-miR-671-5p	18.34	90	mmu-miR-671-5p (NEU2)
189	NEU2	mmu-miR-762	37.66	229	mmu-miR-762 (NEU2)
44	PSAP	mmu-miR-181a	80.26	358	mmu-miR-181a (PSAP)
40	SMPD1	mmu-miR-15b	42.08	202	mmu-miR-15b (SMPD1)
42	SMPD1	mmu-miR-16	49.86	260	mmu-miR-16 (SMPD1)
59	SMPD3	mmu-miR-1935	9.37	10	mmu-miR-1935 (SMPD3)
125	SMPD3	mmu-miR-3473a	289.00	289	mmu-miR-3473a (SMPD3)
43	SUMF1	mmu-miR-17	66.07	327	mmu-miR-17 (SUMF1)
59	SUMF1	mmu-miR-1935	76.55	174	mmu-miR-1935 (SUMF1)
75	SUMF1	mmu-miR-20a	87.00	408	mmu-miR-20a (SUMF1)
197	SUMF1	mmu-miR-93	57.78	271	mmu-miR-93 (SUMF1)
125	SUMF2	mmu-miR-3473a	234.00	234	mmu-miR-3473a (SUMF2)
1	UGCG	mmu-let-7a	67.11	304	mmu-let-7a (UGCG)
3	UGCG	mmu-let-7b	74.62	318	mmu-let-7b (UGCG)
4	UGCG	mmu-let-7c	61.37	305	mmu-let-7c (UGCG)
7	UGCG	mmu-let-7e	56.19	276	mmu-let-7e (UGCG)
10	UGCG	mmu-let-7i	62.89	302	mmu-let-7i (UGCG)
58	UGCG	mmu-miR-1931	6.73	29	mmu-miR-1931 (UGCG)

Pathway ID	Adjusted P-value	Pathway Name			
277	0.002997	BIOCARTA_IL17_PATHWAY			
ASSAY ID	Entrez Gene ID	miRNA Name	miRNApath Score	miRNApath Rank	miRNA - Gene
94	CD34	mmu-miR-24	590.00	590	mmu-miR-24 (CD34)
171	CD34	mmu-miR-671-5p	14.19	68	mmu-miR-671-5p (CD34)
189	CD3E	mmu-miR-762	33.21	209	mmu-miR-762 (CD3E)
44	CD4	mmu-miR-181a	78.24	346	mmu-miR-181a (CD4)
45	CD4	mmu-miR-181b	61.50	290	mmu-miR-181b (CD4)
125	CSF3	mmu-miR-3473a	326.00	326	mmu-miR-3473a (CSF3)
1	IL6	mmu-let-7a	19.58	74	mmu-let-7a (IL6)
3	IL6	mmu-let-7b	28.65	141	mmu-let-7b (IL6)
4	IL6	mmu-let-7c	22.49	96	mmu-let-7c (IL6)
7	IL6	mmu-let-7e	19.62	78	mmu-let-7e (IL6)
10	IL6	mmu-let-7i	20.96	84	mmu-let-7i (IL6)
44	IL6	mmu-miR-181a	11.79	30	mmu-miR-181a (IL6)
45	IL6	mmu-miR-181b	11.04	22	mmu-miR-181b (IL6)

Pathway ID	Adjusted P-value	Pathway Name			
952	0.002997	REACTOME_METABOLISM_OF_NUCLEOTIDES			
ASSAY ID	Entrez Gene ID	miRNA Name	miRNApath Score	miRNApath Rank	miRNA - Gene
12	ADAL	mmu-miR-103	480.00	480	mmu-miR-103 (ADAL)
195	ADK	mmu-miR-92a	159.50	159.5	mmu-miR-92a (ADK)
94	ADSSL1	mmu-miR-24	275.00	275	mmu-miR-24 (ADSSL1)
3	AGXT2	mmu-let-7b	15.39	50	mmu-let-7b (AGXT2)
43	AMPD3	mmu-miR-17	82.57	379	mmu-miR-17 (AMPD3)
75	AMPD3	mmu-miR-20a	85.59	405	mmu-miR-20a (AMPD3)
197	AMPD3	mmu-miR-93	82.37	373	mmu-miR-93 (AMPD3)
41	CAD	mmu-miR-16*	114.00	114	mmu-miR-16* (CAD)
98	CAD	mmu-miR-2861	8.17	36	mmu-miR-2861 (CAD)
12	CDA	mmu-miR-103	697.00	697	mmu-miR-103 (CDA)
58	CTPS	mmu-miR-1931	8.05	39	mmu-miR-1931 (CTPS)
140	CTPS	mmu-miR-466g	22.81	101	mmu-miR-466g (CTPS)
73	DGUOK	mmu-miR-19b	361.50	361.5	mmu-miR-19b (DGUOK)
94	DHODH	mmu-miR-24	494.00	494	mmu-miR-24 (DHODH)
195	DTYMK	mmu-miR-92a	559.50	559.5	mmu-miR-92a (DTYMK)
41	GART	mmu-miR-16*	158.50	158.5	mmu-miR-16* (GART)
94	GMPR	mmu-miR-24	207.00	207	mmu-miR-24 (GMPR)
193	GPX1	mmu-miR-877	7.08	34	mmu-miR-877 (GPX1)
59	IMPDH1	mmu-miR-1935	43.71	106	mmu-miR-1935 (IMPDH1)

73	IMPDH1	mmu-miR-19b	17.00	17	mmu-miR-19b (IMPDH1)
141	IMPDH1	mmu-miR-466h	11.21	51	mmu-miR-466h (IMPDH1)
143	IMPDH1	mmu-miR-466j	8.19	31	mmu-miR-466j (IMPDH1)
182	IMPDH1	mmu-miR-709	14.13	63	mmu-miR-709 (IMPDH1)
198	IMPDH1	mmu-miR-99a	0.76	2	mmu-miR-99a (IMPDH1)
200	IMPDH1	mmu-miR-99b	0.87	2	mmu-miR-99b (IMPDH1)
1	NME4	mmu-let-7a	12.52	35	mmu-let-7a (NME4)
3	NME4	mmu-let-7b	13.14	32	mmu-let-7b (NME4)
4	NME4	mmu-let-7c	13.01	37	mmu-let-7c (NME4)
6	NME4	mmu-let-7d	3.68	6	mmu-let-7d (NME4)
7	NME4	mmu-let-7e	13.23	39	mmu-let-7e (NME4)
10	NME4	mmu-let-7i	13.02	35	mmu-let-7i (NME4)
41	NME4	mmu-miR-16*	293.00	293	mmu-miR-16* (NME4)
189	NME4	mmu-miR-762	4.45	4	mmu-miR-762 (NME4)
94	NT5C1A	mmu-miR-24	123.50	123.5	mmu-miR-24 (NT5C1A)
122	NT5C3	mmu-miR-3470a	3.15	12	mmu-miR-3470a (NT5C3)
195	NT5M	mmu-miR-92a	459.00	459	mmu-miR-92a (NT5M)
171	PAICS	mmu-miR-671-5p	27.81	116	mmu-miR-671-5p (PAICS)
24	PPAT	mmu-miR-125b-5p	46.30	252	mmu-miR-125b-5p (PPAT)
1	RRM2	mmu-let-7a	70.21	308	mmu-let-7a (RRM2)
3	RRM2	mmu-let-7b	70.15	313	mmu-let-7b (RRM2)
4	RRM2	mmu-let-7c	71.61	323	mmu-let-7c (RRM2)
7	RRM2	mmu-let-7e	62.88	289	mmu-let-7e (RRM2)
10	RRM2	mmu-let-7i	41.52	217	mmu-let-7i (RRM2)
13	RRM2	mmu-miR-106a	25.89	108	mmu-miR-106a (RRM2)
75	RRM2	mmu-miR-20a	118.61	456	mmu-miR-20a (RRM2)
197	RRM2	mmu-miR-93	79.13	362	mmu-miR-93 (RRM2)
125	TK1	mmu-miR-3473a	592.00	592	mmu-miR-3473a (TK1)
171	TK2	mmu-miR-671-5p	15.68	74	mmu-miR-671-5p (TK2)
24	TXNRD1	mmu-miR-125b-5p	85.04	311	mmu-miR-125b-5p (TXNRD1)
12	UCK2	mmu-miR-103	211.00	211	mmu-miR-103 (UCK2)
195	UPB1	mmu-miR-92a	646.00	646	mmu-miR-92a (UPB1)
30	UPP1	mmu-miR-138*	74.00	74	mmu-miR-138* (UPP1)
195	UPP2	mmu-miR-92a	410.00	410	mmu-miR-92a (UPP2)
73	XDH	mmu-miR-19b	19.00	19	mmu-miR-19b (XDH)



Pathway ID	Adjusted P-value	Pathway Name			
125	0.003996	KEGG_CYTOSOLIC_DNA_SENSING_PATHWAY			
ASSAY ID	Entrez Gene ID	miRNA Name	miRNApath Score	miRNApath Rank	miRNA - Gene
12	CASP1	mmu-miR-103	429.50	429.5	mmu-miR-103 (CASP1)
213	CASP1	mmu-miR-103	429.50	429.5	mmu-miR-103 (CASP1)
195	IFNA14	mmu-miR-92a	332.00	332	mmu-miR-92a (IFNA14)
473	IFNA14	mmu-miR-92a	332.00	332	mmu-miR-92a (IFNA14)
1	IKBKE	mmu-let-7a	43.83	229	mmu-let-7a (IKBKE)
201	IKBKE	mmu-let-7a	43.83	229	mmu-let-7a (IKBKE)
3	IKBKE	mmu-let-7b	38.28	205	mmu-let-7b (IKBKE)
203	IKBKE	mmu-let-7b	38.28	205	mmu-let-7b (IKBKE)
4	IKBKE	mmu-let-7c	30.69	148	mmu-let-7c (IKBKE)
204	IKBKE	mmu-let-7c	30.69	148	mmu-let-7c (IKBKE)
6	IKBKE	mmu-let-7d	13.94	70	mmu-let-7d (IKBKE)
206	IKBKE	mmu-let-7d	13.94	70	mmu-let-7d (IKBKE)
7	IKBKE	mmu-let-7e	27.89	145	mmu-let-7e (IKBKE)
207	IKBKE	mmu-let-7e	27.89	145	mmu-let-7e (IKBKE)
10	IKBKE	mmu-let-7i	43.43	224	mmu-let-7i (IKBKE)
210	IKBKE	mmu-let-7i	43.43	224	mmu-let-7i (IKBKE)
12	IKBKE	mmu-miR-103	419.00	419	mmu-miR-103 (IKBKE)
213	IKBKE	mmu-miR-103	419.00	419	mmu-miR-103 (IKBKE)
1	IL6	mmu-let-7a	19.58	74	mmu-let-7a (IL6)
201	IL6	mmu-let-7a	19.58	74	mmu-let-7a (IL6)
3	IL6	mmu-let-7b	28.65	141	mmu-let-7b (IL6)
203	IL6	mmu-let-7b	28.65	141	mmu-let-7b (IL6)
4	IL6	mmu-let-7c	22.49	96	mmu-let-7c (IL6)
204	IL6	mmu-let-7c	22.49	96	mmu-let-7c (IL6)
7	IL6	mmu-let-7e	19.62	78	mmu-let-7e (IL6)
207	IL6	mmu-let-7e	19.62	78	mmu-let-7e (IL6)
10	IL6	mmu-let-7i	20.96	84	mmu-let-7i (IL6)
210	IL6	mmu-let-7i	20.96	84	mmu-let-7i (IL6)
44	IL6	mmu-miR-181a	11.79	30	mmu-miR-181a (IL6)
264	IL6	mmu-miR-181a	11.79	30	mmu-miR-181a (IL6)
45	IL6	mmu-miR-181b	11.04	22	mmu-miR-181b (IL6)
265	IL6	mmu-miR-181b	11.04	22	mmu-miR-181b (IL6)
195	NFKB1	mmu-miR-92a	293.00	293	mmu-miR-92a (NFKB1)
473	NFKB1	mmu-miR-92a	293.00	293	mmu-miR-92a (NFKB1)
73	NFKBIA	mmu-miR-19b	80.00	80	mmu-miR-19b (NFKBIA)
317	NFKBIA	mmu-miR-19b	80.00	80	mmu-miR-19b (NFKBIA)
73	POLR1C	mmu-miR-19b	153.00	153	mmu-miR-19b (POLR1C)
317	POLR1C	mmu-miR-19b	153.00	153	mmu-miR-19b (POLR1C)

41	POLR3C	mmu-miR-16*	232.00	232	mmu-miR-16* (POLR3C)
258	POLR3C	mmu-miR-16*	232.00	232	mmu-miR-16* (POLR3C)
12	POLR3D	mmu-miR-103	595.00	595	mmu-miR-103 (POLR3D)
213	POLR3D	mmu-miR-103	595.00	595	mmu-miR-103 (POLR3D)
41	POLR3D	mmu-miR-16*	119.00	119	mmu-miR-16* (POLR3D)
258	POLR3D	mmu-miR-16*	119.00	119	mmu-miR-16* (POLR3D)
40	POLR3F	mmu-miR-15b	50.66	253	mmu-miR-15b (POLR3F)
257	POLR3F	mmu-miR-15b	50.66	253	mmu-miR-15b (POLR3F)
42	POLR3F	mmu-miR-16	47.55	240	mmu-miR-16 (POLR3F)
259	POLR3F	mmu-miR-16	47.55	240	mmu-miR-16 (POLR3F)
75	POLR3G	mmu-miR-20a	43.81	195	mmu-miR-20a (POLR3G)
321	POLR3G	mmu-miR-20a	43.81	195	mmu-miR-20a (POLR3G)
197	POLR3G	mmu-miR-93	41.21	183	mmu-miR-93 (POLR3G)
476	POLR3G	mmu-miR-93	41.21	183	mmu-miR-93 (POLR3G)
94	PYCARD	mmu-miR-24	396.00	396	mmu-miR-24 (PYCARD)
348	PYCARD	mmu-miR-24	396.00	396	mmu-miR-24 (PYCARD)
73	TBK1	mmu-miR-19b	625.00	625	mmu-miR-19b (TBK1)
317	TBK1	mmu-miR-19b	625.00	625	mmu-miR-19b (TBK1)
125	TMEM173	mmu-miR-3473a	546.00	546	mmu-miR-3473a (TMEM173)
41	ZBP1	mmu-miR-16*	264.00	264	mmu-miR-16* (ZBP1)
258	ZBP1	mmu-miR-16*	264.00	264	mmu-miR-16* (ZBP1)

Pathway ID	Adjusted P-value	Pathway Name			
615	0.004995	PID_ARF_3PATHWAY			
ASSAY ID	Entrez Gene ID	miRNA Name	miRNApath Score	miRNApath Rank	miRNA - Gene
12	AP2A1	mmu-miR-103	639.00	639	mmu-miR-103 (AP2A1)
73	AP2M1	mmu-miR-19b	547.00	547	mmu-miR-19b (AP2M1)
180	AP2M1	mmu-miR-705	22.58	134	mmu-miR-705 (AP2M1)
162	ARFIP2	mmu-miR-669b	25.21	132	mmu-miR-669b (ARFIP2)
73	ASAP1	mmu-miR-19b	275.00	275	mmu-miR-19b (ASAP1)
44	CD4	mmu-miR-181a	78.24	346	mmu-miR-181a (CD4)
45	CD4	mmu-miR-181b	61.50	290	mmu-miR-181b (CD4)
172	CLTA	mmu-miR-674	6.45	25	mmu-miR-674 (CLTA)
189	CLTB	mmu-miR-762	18.05	92	mmu-miR-762 (CLTB)
13	GBF1	mmu-miR-106a	30.49	110	mmu-miR-106a (GBF1)
43	GBF1	mmu-miR-17	48.00	222	mmu-miR-17 (GBF1)
75	GBF1	mmu-miR-20a	106.95	445	mmu-miR-20a (GBF1)
182	GBF1	mmu-miR-709	26.91	165	mmu-miR-709 (GBF1)
197	GBF1	mmu-miR-93	32.57	130	mmu-miR-93 (GBF1)
1	GGA3	mmu-let-7a	23.26	110	mmu-let-7a (GGA3)
3	GGA3	mmu-let-7b	19.01	72	mmu-let-7b (GGA3)
4	GGA3	mmu-let-7c	19.89	77	mmu-let-7c (GGA3)
6	GGA3	mmu-let-7d	8.93	44	mmu-let-7d (GGA3)
7	GGA3	mmu-let-7e	38.46	206	mmu-let-7e (GGA3)
10	GGA3	mmu-let-7i	27.25	134	mmu-let-7i (GGA3)
30	GGA3	mmu-miR-138*	62.00	62	mmu-miR-138* (GGA3)
40	GGA3	mmu-miR-15b	51.94	262	mmu-miR-15b (GGA3)
42	GGA3	mmu-miR-16	82.24	405	mmu-miR-16 (GGA3)
189	KDELR1	mmu-miR-762	46.95	248	mmu-miR-762 (KDELR1)
30	PLD2	mmu-miR-138*	2.00	2	mmu-miR-138* (PLD2)
189	PLD2	mmu-miR-762	43.92	247	mmu-miR-762 (PLD2)

Pathway ID	Adjusted P-value	Pathway Name			
1251	0.004995	REACTOME_THE_ROLE_OF_NEF_IN_HIV1_REPLICATION_AND_DISEASE_PATHOGENESIS			
ASSAY ID	Entrez Gene ID	miRNA Name	miRNApath Score	miRNApath Rank	miRNA - Gene
18	AP1G1	mmu-miR-1187	5.82	17	mmu-miR-1187 (AP1G1)
56	AP1G1	mmu-miR-191	2.81	20	mmu-miR-191 (AP1G1)
180	AP1G1	mmu-miR-705	4.49	4	mmu-miR-705 (AP1G1)
12	AP1M1	mmu-miR-103	564.00	564	mmu-miR-103 (AP1M1)
157	AP1M1	mmu-miR-574-5p	10.72	55	mmu-miR-574-5p (AP1M1)
189	AP1M1	mmu-miR-762	32.10	200	mmu-miR-762 (AP1M1)
94	AP1M2	mmu-miR-24	62.00	62	mmu-miR-24 (AP1M2)
171	AP1M2	mmu-miR-671-5p	12.09	51	mmu-miR-671-5p (AP1M2)
1	AP1S1	mmu-let-7a	18.75	70	mmu-let-7a (AP1S1)
3	AP1S1	mmu-let-7b	17.25	62	mmu-let-7b (AP1S1)
4	AP1S1	mmu-let-7c	18.42	66	mmu-let-7c (AP1S1)
6	AP1S1	mmu-let-7d	5.63	18	mmu-let-7d (AP1S1)
7	AP1S1	mmu-let-7e	16.74	58	mmu-let-7e (AP1S1)
10	AP1S1	mmu-let-7i	19.58	73	mmu-let-7i (AP1S1)
59	AP1S1	mmu-miR-1935	33.57	77	mmu-miR-1935 (AP1S1)
12	AP1S2	mmu-miR-103	702.00	702	mmu-miR-103 (AP1S2)
12	AP2A1	mmu-miR-103	639.00	639	mmu-miR-103 (AP2A1)
73	AP2M1	mmu-miR-19b	547.00	547	mmu-miR-19b (AP2M1)
180	AP2M1	mmu-miR-705	22.58	134	mmu-miR-705 (AP2M1)
182	AP2S1	mmu-miR-709	38.55	220	mmu-miR-709 (AP2S1)
40	CD28	mmu-miR-15b	96.14	472	mmu-miR-15b (CD28)
42	CD28	mmu-miR-16	105.30	477	mmu-miR-16 (CD28)
44	CD4	mmu-miR-181a	78.24	346	mmu-miR-181a (CD4)
45	CD4	mmu-miR-181b	61.50	290	mmu-miR-181b (CD4)
24	HCK	mmu-miR-125b-5p	25.07	125	mmu-miR-125b-5p (HCK)
141	LCK	mmu-miR-466h	14.47	71	mmu-miR-466h (LCK)
59	PACS1	mmu-miR-1935	39.22	91	mmu-miR-1935 (PACS1)
98	PACS1	mmu-miR-2861	7.98	33	mmu-miR-2861 (PACS1)
182	PACS1	mmu-miR-709	12.87	52	mmu-miR-709 (PACS1)
93	PAK2	mmu-miR-23b	3.09	13	mmu-miR-23b (PAK2)
96	PAK2	mmu-miR-26a	34.14	173	mmu-miR-26a (PAK2)
125	PAK2	mmu-miR-3473a	44.00	44	mmu-miR-3473a (PAK2)

Pathway ID	Adjusted P-value	Pathway Name			
697	0.005994	REACTOME_NEF_MEDIATES_DOWN_MODULATION_OF_CELL_SURFACE_RECEPTORS_BY_RECRUITING_THEM_TO_CLATHRIN_ADAPTERS			
ASSAY ID	Entrez Gene ID	miRNA Name	miRNApath Score	miRNApath Rank	miRNA - Gene
18	AP1G1	mmu-miR-1187	5.82	17	mmu-miR-1187 (AP1G1)
56	AP1G1	mmu-miR-191	2.81	20	mmu-miR-191 (AP1G1)
180	AP1G1	mmu-miR-705	4.49	4	mmu-miR-705 (AP1G1)
12	AP1M1	mmu-miR-103	564.00	564	mmu-miR-103 (AP1M1)
157	AP1M1	mmu-miR-574-5p	10.72	55	mmu-miR-574-5p (AP1M1)
189	AP1M1	mmu-miR-762	32.10	200	mmu-miR-762 (AP1M1)
94	AP1M2	mmu-miR-24	62.00	62	mmu-miR-24 (AP1M2)
171	AP1M2	mmu-miR-671-5p	12.09	51	mmu-miR-671-5p (AP1M2)
1	AP1S1	mmu-let-7a	18.75	70	mmu-let-7a (AP1S1)
3	AP1S1	mmu-let-7b	17.25	62	mmu-let-7b (AP1S1)
4	AP1S1	mmu-let-7c	18.42	66	mmu-let-7c (AP1S1)
6	AP1S1	mmu-let-7d	5.63	18	mmu-let-7d (AP1S1)
7	AP1S1	mmu-let-7e	16.74	58	mmu-let-7e (AP1S1)
10	AP1S1	mmu-let-7i	19.58	73	mmu-let-7i (AP1S1)
59	AP1S1	mmu-miR-1935	33.57	77	mmu-miR-1935 (AP1S1)
12	AP1S2	mmu-miR-103	702.00	702	mmu-miR-103 (AP1S2)
12	AP2A1	mmu-miR-103	639.00	639	mmu-miR-103 (AP2A1)
73	AP2M1	mmu-miR-19b	547.00	547	mmu-miR-19b (AP2M1)
180	AP2M1	mmu-miR-705	22.58	134	mmu-miR-705 (AP2M1)
182	AP2S1	mmu-miR-709	38.55	220	mmu-miR-709 (AP2S1)
40	CD28	mmu-miR-15b	96.14	472	mmu-miR-15b (CD28)
42	CD28	mmu-miR-16	105.30	477	mmu-miR-16 (CD28)
44	CD4	mmu-miR-181a	78.24	346	mmu-miR-181a (CD4)
45	CD4	mmu-miR-181b	61.50	290	mmu-miR-181b (CD4)
141	LCK	mmu-miR-466h	14.47	71	mmu-miR-466h (LCK)
59	PACS1	mmu-miR-1935	39.22	91	mmu-miR-1935 (PACS1)
98	PACS1	mmu-miR-2861	7.98	33	mmu-miR-2861 (PACS1)
182	PACS1	mmu-miR-709	12.87	52	mmu-miR-709 (PACS1)

Pathway ID	Adjusted P-value	Pathway Name			
177	0.007992	KEGG_ASTHMA			
ASSAY ID	Entrez Gene ID	miRNA Name	miRNApath Score	miRNApath Rank	miRNA - Gene
73	CCL11	mmu-miR-19b	137.00	137	mmu-miR-19b (CCL11)
41	CD40LG	mmu-miR-16*	143.00	143	mmu-miR-16* (CD40LG)
94	CD40LG	mmu-miR-24	244.00	244	mmu-miR-24 (CD40LG)
3	IL10	mmu-let-7b	36.28	194	mmu-let-7b (IL10)
4	IL10	mmu-let-7c	46.41	249	mmu-let-7c (IL10)
19	IL10	mmu-miR-1195	0.87	4	mmu-miR-1195 (IL10)
1	IL13	mmu-let-7a	9.82	21	mmu-let-7a (IL13)
3	IL13	mmu-let-7b	9.16	20	mmu-let-7b (IL13)
4	IL13	mmu-let-7c	12.38	33	mmu-let-7c (IL13)
6	IL13	mmu-let-7d	7.88	39	mmu-let-7d (IL13)
7	IL13	mmu-let-7e	12.99	38	mmu-let-7e (IL13)
10	IL13	mmu-let-7i	17.99	64	mmu-let-7i (IL13)
94	IL4	mmu-miR-24	193.50	193.5	mmu-miR-24 (IL4)
125	MS4A2	mmu-miR-3473a	249.00	249	mmu-miR-3473a (MS4A2)
182	PRG2	mmu-miR-709	35.56	207	mmu-miR-709 (PRG2)
189	TNF	mmu-miR-762	39.09	236	mmu-miR-762 (TNF)
195	TNF	mmu-miR-92a	422.00	422	mmu-miR-92a (TNF)

Pathway ID	Adjusted P-value	Pathway Name			
282	0.007992	BIOCARTA_IL6_PATHWAY			
ASSAY ID	Entrez Gene ID	miRNA Name	miRNApath Score	miRNApath Rank	miRNA - Gene
56	CEBPB	mmu-miR-191	2.03	6	mmu-miR-191 (CEBPB)
24	CSNK2A1	mmu-miR-125b-5p	59.73	287	mmu-miR-125b-5p (CSNK2A1)
137	CSNK2A1	mmu-miR-466f-3p	13.01	48	mmu-miR-466f-3p (CSNK2A1)
148	CSNK2A1	mmu-miR-467f	23.76	104	mmu-miR-467f (CSNK2A1)
46	ELK1	mmu-miR-1892	1.75	2	mmu-miR-1892 (ELK1)
49	ELK1	mmu-miR-1894-5p	6.54	18	mmu-miR-1894-5p (ELK1)
44	FOS	mmu-miR-181a	28.65	113	mmu-miR-181a (FOS)
125	GRB2	mmu-miR-3473a	91.00	91	mmu-miR-3473a (GRB2)
137	GRB2	mmu-miR-466f-3p	16.95	73	mmu-miR-466f-3p (GRB2)
148	GRB2	mmu-miR-467f	9.05	21	mmu-miR-467f (GRB2)
1	IL6	mmu-let-7a	19.58	74	mmu-let-7a (IL6)
3	IL6	mmu-let-7b	28.65	141	mmu-let-7b (IL6)
4	IL6	mmu-let-7c	22.49	96	mmu-let-7c (IL6)
7	IL6	mmu-let-7e	19.62	78	mmu-let-7e (IL6)

10	IL6	mmu-let-7i	20.96	84	mmu-let-7i (IL6)
44	IL6	mmu-miR-181a	11.79	30	mmu-miR-181a (IL6)
45	IL6	mmu-miR-181b	11.04	22	mmu-miR-181b (IL6)
13	JAK1	mmu-miR-106a	14.51	57	mmu-miR-106a (JAK1)
43	JAK1	mmu-miR-17	42.24	185	mmu-miR-17 (JAK1)
75	JAK1	mmu-miR-20a	34.05	133	mmu-miR-20a (JAK1)
125	JAK1	mmu-miR-3473a	645.00	645	mmu-miR-3473a (JAK1)
40	MAP2K1	mmu-miR-15b	22.88	76	mmu-miR-15b (MAP2K1)
42	MAP2K1	mmu-miR-16	50.16	262	mmu-miR-16 (MAP2K1)
44	MAP2K1	mmu-miR-181a	48.03	222	mmu-miR-181a (MAP2K1)
45	MAP2K1	mmu-miR-181b	87.59	389	mmu-miR-181b (MAP2K1)
73	MAP2K1	mmu-miR-19b	583.00	583	mmu-miR-19b (MAP2K1)
30	MAPK3	mmu-miR-138*	470.00	470	mmu-miR-138* (MAPK3)
41	MAPK3	mmu-miR-16*	279.50	279.5	mmu-miR-16* (MAPK3)
59	PTPN11	mmu-miR-1935	25.98	45	mmu-miR-1935 (PTPN11)
42	RAF1	mmu-miR-16	57.03	302	mmu-miR-16 (RAF1)
73	RAF1	mmu-miR-19b	273.00	273	mmu-miR-19b (RAF1)
172	SHC1	mmu-miR-674	16.28	96	mmu-miR-674 (SHC1)
43	SOS1	mmu-miR-17	56.08	269	mmu-miR-17 (SOS1)
44	SOS1	mmu-miR-181a	58.55	279	mmu-miR-181a (SOS1)
45	SOS1	mmu-miR-181b	36.15	156	mmu-miR-181b (SOS1)
75	SOS1	mmu-miR-20a	32.95	128	mmu-miR-20a (SOS1)
197	SOS1	mmu-miR-93	27.84	101	mmu-miR-93 (SOS1)
142	SRF	mmu-miR-466i	19.97	77	mmu-miR-466i (SRF)
189	SRF	mmu-miR-762	16.03	79	mmu-miR-762 (SRF)
43	STAT3	mmu-miR-17	49.66	233	mmu-miR-17 (STAT3)
75	STAT3	mmu-miR-20a	53.60	265	mmu-miR-20a (STAT3)
174	STAT3	mmu-miR-690	8.28	45	mmu-miR-690 (STAT3)
197	STAT3	mmu-miR-93	45.91	212	mmu-miR-93 (STAT3)
1	TYK2	mmu-let-7a	8.27	12	mmu-let-7a (TYK2)
3	TYK2	mmu-let-7b	9.28	22	mmu-let-7b (TYK2)
4	TYK2	mmu-let-7c	8.28	13	mmu-let-7c (TYK2)
6	TYK2	mmu-let-7d	4.99	15	mmu-let-7d (TYK2)
7	TYK2	mmu-let-7e	7.03	15	mmu-let-7e (TYK2)
10	TYK2	mmu-let-7i	8.61	17	mmu-let-7i (TYK2)

Pathway ID	Adjusted P-value	Pathway Name			
739	0.007992	REACTOME_TRAFFICKING_AND_PROCESSING_OF_ENDOSOMAL_TLR			
ASSAY ID	Entrez Gene ID	miRNA Name	miRNApath Score	miRNApath Rank	miRNA - Gene
59	CNPY3	mmu-miR-1935	64.41	159	mmu-miR-1935 (CNPY3)
195	CTSS	mmu-miR-92a	598.50	598.5	mmu-miR-92a (CTSS)
44	HSP90B1	mmu-miR-181a	22.65	80	mmu-miR-181a (HSP90B1)
45	HSP90B1	mmu-miR-181b	47.04	218	mmu-miR-181b (HSP90B1)
137	HSP90B1	mmu-miR-466f-3p	21.20	96	mmu-miR-466f-3p (HSP90B1)
148	HSP90B1	mmu-miR-467f	20.29	90	mmu-miR-467f (HSP90B1)

Pathway ID	Adjusted P-value	Pathway Name			
71	0.00999	KEGG_ABC_TRANSPORTERS			
ASSAY ID	Entrez Gene ID	miRNA Name	miRNApath Score	miRNApath Rank	miRNA - Gene
43	ABCA1	mmu-miR-17	25.84	92	mmu-miR-17 (ABCA1)
75	ABCA1	mmu-miR-20a	31.28	120	mmu-miR-20a (ABCA1)
197	ABCA1	mmu-miR-93	32.86	131	mmu-miR-93 (ABCA1)
74	ABCA2	mmu-miR-207	10.49	66	mmu-miR-207 (ABCA2)
73	ABCA5	mmu-miR-19b	594.50	594.5	mmu-miR-19b (ABCA5)
96	ABCA5	mmu-miR-26a	7.02	13	mmu-miR-26a (ABCA5)
30	ABCA6	mmu-miR-138*	331.50	331.5	mmu-miR-138* (ABCA6)
46	ABCB7	mmu-miR-1892	9.91	38	mmu-miR-1892 (ABCB7)
73	ABCB7	mmu-miR-19b	2.00	2	mmu-miR-19b (ABCB7)
1	ABCB9	mmu-let-7a	23.04	108	mmu-let-7a (ABCB9)
3	ABCB9	mmu-let-7b	29.46	144	mmu-let-7b (ABCB9)
4	ABCB9	mmu-let-7c	23.84	107	mmu-let-7c (ABCB9)
6	ABCB9	mmu-let-7d	15.59	76	mmu-let-7d (ABCB9)
7	ABCB9	mmu-let-7e	53.76	266	mmu-let-7e (ABCB9)
10	ABCB9	mmu-let-7i	26.81	131	mmu-let-7i (ABCB9)
112	ABCB9	mmu-miR-31	13.08	80	mmu-miR-31 (ABCB9)
182	ABCC1	mmu-miR-709	33.46	197	mmu-miR-709 (ABCC1)
1	ABCC10	mmu-let-7a	68.83	307	mmu-let-7a (ABCC10)
3	ABCC10	mmu-let-7b	70.08	312	mmu-let-7b (ABCC10)
4	ABCC10	mmu-let-7c	70.14	322	mmu-let-7c (ABCC10)
7	ABCC10	mmu-let-7e	66.90	295	mmu-let-7e (ABCC10)
10	ABCC10	mmu-let-7i	66.00	309	mmu-let-7i (ABCC10)
121	ABCC12	mmu-miR-346	3.17	19	mmu-miR-346 (ABCC12)
12	ABCC3	mmu-miR-103	262.00	262	mmu-miR-103 (ABCC3)
94	ABCC3	mmu-miR-24	504.00	504	mmu-miR-24 (ABCC3)
182	ABCC3	mmu-miR-709	31.35	187	mmu-miR-709 (ABCC3)



96	ABCC4	mmu-miR-26a	63.73	294	mmu-miR-26a (ABCC4)
1	ABCC5	mmu-let-7a	31.86	162	mmu-let-7a (ABCC5)
3	ABCC5	mmu-let-7b	51.57	273	mmu-let-7b (ABCC5)
4	ABCC5	mmu-let-7c	52.40	283	mmu-let-7c (ABCC5)
7	ABCC5	mmu-let-7e	18.49	70	mmu-let-7e (ABCC5)
10	ABCC5	mmu-let-7i	27.82	140	mmu-let-7i (ABCC5)
24	ABCC5	mmu-miR-125b-5p	6.12	9	mmu-miR-125b-5p (ABCC5)
94	ABCD1	mmu-miR-24	392.00	392	mmu-miR-24 (ABCD1)
162	ABCD2	mmu-miR-669b	23.59	128	mmu-miR-669b (ABCD2)
137	ABCD3	mmu-miR-466f-3p	10.97	34	mmu-miR-466f-3p (ABCD3)
40	ABCG4	mmu-miR-15b	73.85	383	mmu-miR-15b (ABCG4)
42	ABCG4	mmu-miR-16	81.58	403	mmu-miR-16 (ABCG4)
189	ABCG4	mmu-miR-762	15.31	76	mmu-miR-762 (ABCG4)
41	ABCG5	mmu-miR-16*	183.00	183	mmu-miR-16* (ABCG5)
94	TAP2	mmu-miR-24	230.00	230	mmu-miR-24 (TAP2)

Pathway ID	Adjusted P-value	Pathway Name			
123	0.00999	KEGG_NOD_LIKE_RECEPTOR_SIGNALING_PATHWAY			
ASSAY ID	Entrez Gene ID	miRNA Name	miRNApath Score	miRNApath Rank	miRNA - Gene
94	CARD9	mmu-miR-24	557.00	557	mmu-miR-24 (CARD9)
12	CASP1	mmu-miR-103	429.50	429.5	mmu-miR-103 (CASP1)
13	CASP8	mmu-miR-106a	9.36	35	mmu-miR-106a (CASP8)
43	CASP8	mmu-miR-17	18.29	53	mmu-miR-17 (CASP8)
75	CASP8	mmu-miR-20a	20.25	63	mmu-miR-20a (CASP8)
73	CCL11	mmu-miR-19b	137.00	137	mmu-miR-19b (CCL11)
195	CCL7	mmu-miR-92a	703.00	703	mmu-miR-92a (CCL7)
94	HSP90AB1	mmu-miR-24	144.00	144	mmu-miR-24 (HSP90AB1)
44	HSP90B1	mmu-miR-181a	22.65	80	mmu-miR-181a (HSP90B1)
45	HSP90B1	mmu-miR-181b	47.04	218	mmu-miR-181b (HSP90B1)
137	HSP90B1	mmu-miR-466f-3p	21.20	96	mmu-miR-466f-3p (HSP90B1)
148	HSP90B1	mmu-miR-467f	20.29	90	mmu-miR-467f (HSP90B1)
1	IL6	mmu-let-7a	19.58	74	mmu-let-7a (IL6)
3	IL6	mmu-let-7b	28.65	141	mmu-let-7b (IL6)
4	IL6	mmu-let-7c	22.49	96	mmu-let-7c (IL6)
7	IL6	mmu-let-7e	19.62	78	mmu-let-7e (IL6)
10	IL6	mmu-let-7i	20.96	84	mmu-let-7i (IL6)
44	IL6	mmu-miR-181a	11.79	30	mmu-miR-181a (IL6)
45	IL6	mmu-miR-181b	11.04	22	mmu-miR-181b (IL6)
44	MAPK1	mmu-miR-181a	60.89	287	mmu-miR-181a (MAPK1)
45	MAPK1	mmu-miR-181b	66.76	315	mmu-miR-181b (MAPK1)
140	MAPK10	mmu-miR-466g	4.43	8	mmu-miR-466g (MAPK10)

30	MAPK12	mmu-miR-138*	126.00	126	mmu-miR-138* (MAPK12)
171	MAPK12	mmu-miR-671-5p	17.81	87	mmu-miR-671-5p (MAPK12)
49	MAPK14	mmu-miR-1894-5p	1.91	3	mmu-miR-1894-5p (MAPK14)
30	MAPK3	mmu-miR-138*	470.00	470	mmu-miR-138* (MAPK3)
41	MAPK3	mmu-miR-16*	279.50	279.5	mmu-miR-16* (MAPK3)
1	MAPK8	mmu-let-7a	48.26	253	mmu-let-7a (MAPK8)
3	MAPK8	mmu-let-7b	41.97	225	mmu-let-7b (MAPK8)
4	MAPK8	mmu-let-7c	28.92	138	mmu-let-7c (MAPK8)
7	MAPK8	mmu-let-7e	43.62	228	mmu-let-7e (MAPK8)
10	MAPK8	mmu-let-7i	34.44	186	mmu-let-7i (MAPK8)
12	MAPK8	mmu-miR-103	635.00	635	mmu-miR-103 (MAPK8)
27	MAPK8	mmu-miR-130b	15.92	71	mmu-miR-130b (MAPK8)
40	MAPK8	mmu-miR-15b	16.83	41	mmu-miR-15b (MAPK8)
42	MAPK8	mmu-miR-16	15.16	38	mmu-miR-16 (MAPK8)
68	MAPK8	mmu-miR-1949	8.17	41	mmu-miR-1949 (MAPK8)
162	MAPK8	mmu-miR-669b	4.82	11	mmu-miR-669b (MAPK8)
12	MAPK9	mmu-miR-103	348.50	348.5	mmu-miR-103 (MAPK9)
43	MAPK9	mmu-miR-17	40.15	168	mmu-miR-17 (MAPK9)
75	MAPK9	mmu-miR-20a	66.01	326	mmu-miR-20a (MAPK9)
197	MAPK9	mmu-miR-93	27.83	100	mmu-miR-93 (MAPK9)
195	NFKB1	mmu-miR-92a	293.00	293	mmu-miR-92a (NFKB1)
73	NFKBIA	mmu-miR-19b	80.00	80	mmu-miR-19b (NFKBIA)
94	PYCARD	mmu-miR-24	396.00	396	mmu-miR-24 (PYCARD)
94	TAB1	mmu-miR-24	664.00	664	mmu-miR-24 (TAB1)
40	TAB3	mmu-miR-15b	59.30	309	mmu-miR-15b (TAB3)
42	TAB3	mmu-miR-16	48.68	248	mmu-miR-16 (TAB3)
44	TAB3	mmu-miR-181a	44.97	204	mmu-miR-181a (TAB3)
45	TAB3	mmu-miR-181b	78.84	367	mmu-miR-181b (TAB3)
96	TAB3	mmu-miR-26a	55.56	269	mmu-miR-26a (TAB3)
189	TNF	mmu-miR-762	39.09	236	mmu-miR-762 (TNF)
195	TNF	mmu-miR-92a	422.00	422	mmu-miR-92a (TNF)
44	XIAP	mmu-miR-181a	29.74	118	mmu-miR-181a (XIAP)
45	XIAP	mmu-miR-181b	32.46	137	mmu-miR-181b (XIAP)
75	XIAP	mmu-miR-20a	34.64	138	mmu-miR-20a (XIAP)

Pathway ID	Adjusted P-value	Pathway Name			
417	0.00999	ST_IL_13_PATHWAY			
ASSAY ID	Entrez Gene ID	miRNA Name	miRNApath Score	miRNApath Rank	miRNA - Gene
1	IL13	mmu-let-7a	9.82	21	mmu-let-7a (IL13)
3	IL13	mmu-let-7b	9.16	20	mmu-let-7b (IL13)
4	IL13	mmu-let-7c	12.38	33	mmu-let-7c (IL13)
6	IL13	mmu-let-7d	7.88	39	mmu-let-7d (IL13)
7	IL13	mmu-let-7e	12.99	38	mmu-let-7e (IL13)
10	IL13	mmu-let-7i	17.99	64	mmu-let-7i (IL13)
13	JAK1	mmu-miR-106a	14.51	57	mmu-miR-106a (JAK1)
43	JAK1	mmu-miR-17	42.24	185	mmu-miR-17 (JAK1)
75	JAK1	mmu-miR-20a	34.05	133	mmu-miR-20a (JAK1)
125	JAK1	mmu-miR-3473a	645.00	645	mmu-miR-3473a (JAK1)
1	TYK2	mmu-let-7a	8.27	12	mmu-let-7a (TYK2)
3	TYK2	mmu-let-7b	9.28	22	mmu-let-7b (TYK2)
4	TYK2	mmu-let-7c	8.28	13	mmu-let-7c (TYK2)
6	TYK2	mmu-let-7d	4.99	15	mmu-let-7d (TYK2)
7	TYK2	mmu-let-7e	7.03	15	mmu-let-7e (TYK2)
10	TYK2	mmu-let-7i	8.61	17	mmu-let-7i (TYK2)

Pathway ID	Adjusted P-value	Pathway Name			
679	0.00999	REACTOME_SIGNALING_BY_NODAL			
ASSAY ID	Entrez Gene ID	miRNA Name	miRNApath Score	miRNApath Rank	miRNA - Gene
1	ACVR1C	mmu-let-7a	20.83	88	mmu-let-7a (ACVR1C)
3	ACVR1C	mmu-let-7b	19.34	76	mmu-let-7b (ACVR1C)
4	ACVR1C	mmu-let-7c	18.56	68	mmu-let-7c (ACVR1C)
7	ACVR1C	mmu-let-7e	15.12	51	mmu-let-7e (ACVR1C)
10	ACVR1C	mmu-let-7i	18.06	65	mmu-let-7i (ACVR1C)
44	ACVR1C	mmu-miR-181a	41.75	187	mmu-miR-181a (ACVR1C)
45	ACVR1C	mmu-miR-181b	22.76	86	mmu-miR-181b (ACVR1C)
96	ACVR1C	mmu-miR-26a	23.59	107	mmu-miR-26a (ACVR1C)
40	ACVR2A	mmu-miR-15b	17.45	46	mmu-miR-15b (ACVR2A)
42	ACVR2A	mmu-miR-16	19.24	58	mmu-miR-16 (ACVR2A)
171	ACVR2A	mmu-miR-671-5p	16.30	82	mmu-miR-671-5p (ACVR2A)
172	ACVR2B	mmu-miR-674	7.48	31	mmu-miR-674 (ACVR2B)
43	FURIN	mmu-miR-17	61.46	298	mmu-miR-17 (FURIN)
75	FURIN	mmu-miR-20a	71.04	351	mmu-miR-20a (FURIN)
197	FURIN	mmu-miR-93	53.60	250	mmu-miR-93 (FURIN)
30	LEFTY1	mmu-miR-138*	20.00	20	mmu-miR-138* (LEFTY1)

41	LEFTY1	mmu-miR-16*	10.00	10	mmu-miR-16* (LEFTY1)
94	LEFTY1	mmu-miR-24	410.00	410	mmu-miR-24 (LEFTY1)
121	NODAL	mmu-miR-346	2.94	14	mmu-miR-346 (NODAL)
30	PCSK6	mmu-miR-138*	96.00	96	mmu-miR-138* (PCSK6)
185	PCSK6	mmu-miR-714	1.95	8	mmu-miR-714 (PCSK6)
12	SMAD2	mmu-miR-103	198.00	198	mmu-miR-103 (SMAD2)
42	SMAD3	mmu-miR-16	102.41	475	mmu-miR-16 (SMAD3)
96	SMAD4	mmu-miR-26a	82.26	317	mmu-miR-26a (SMAD4)

Pathway ID      Adjusted P-value      Pathway Name  
99      0.011988      KEGG\_LYSOSOME

ASSAY ID	Entrez Gene ID	miRNA Name	miRNApath Score	miRNApath Rank	miRNA - Gene
74	ABCA2	mmu-miR-207	10.49	66	mmu-miR-207 (ABCA2)
1	ABCB9	mmu-let-7a	23.04	108	mmu-let-7a (ABCB9)
3	ABCB9	mmu-let-7b	29.46	144	mmu-let-7b (ABCB9)
4	ABCB9	mmu-let-7c	23.84	107	mmu-let-7c (ABCB9)
6	ABCB9	mmu-let-7d	15.59	76	mmu-let-7d (ABCB9)
7	ABCB9	mmu-let-7e	53.76	266	mmu-let-7e (ABCB9)
10	ABCB9	mmu-let-7i	26.81	131	mmu-let-7i (ABCB9)
112	ABCB9	mmu-miR-31	13.08	80	mmu-miR-31 (ABCB9)
182	ACP2	mmu-miR-709	41.48	236	mmu-miR-709 (ACP2)
189	ACP2	mmu-miR-762	30.57	190	mmu-miR-762 (ACP2)
18	AP1G1	mmu-miR-1187	5.82	17	mmu-miR-1187 (AP1G1)
56	AP1G1	mmu-miR-191	2.81	20	mmu-miR-191 (AP1G1)
180	AP1G1	mmu-miR-705	4.49	4	mmu-miR-705 (AP1G1)
12	AP1M1	mmu-miR-103	564.00	564	mmu-miR-103 (AP1M1)
157	AP1M1	mmu-miR-574-5p	10.72	55	mmu-miR-574-5p (AP1M1)
189	AP1M1	mmu-miR-762	32.10	200	mmu-miR-762 (AP1M1)
94	AP1M2	mmu-miR-24	62.00	62	mmu-miR-24 (AP1M2)
171	AP1M2	mmu-miR-671-5p	12.09	51	mmu-miR-671-5p (AP1M2)
1	AP1S1	mmu-let-7a	18.75	70	mmu-let-7a (AP1S1)
3	AP1S1	mmu-let-7b	17.25	62	mmu-let-7b (AP1S1)
4	AP1S1	mmu-let-7c	18.42	66	mmu-let-7c (AP1S1)
6	AP1S1	mmu-let-7d	5.63	18	mmu-let-7d (AP1S1)
7	AP1S1	mmu-let-7e	16.74	58	mmu-let-7e (AP1S1)
10	AP1S1	mmu-let-7i	19.58	73	mmu-let-7i (AP1S1)
59	AP1S1	mmu-miR-1935	33.57	77	mmu-miR-1935 (AP1S1)
12	AP1S2	mmu-miR-103	702.00	702	mmu-miR-103 (AP1S2)
12	AP3B1	mmu-miR-103	52.00	52	mmu-miR-103 (AP3B1)
38	AP3B1	mmu-miR-151-5p	1.53	7	mmu-miR-151-5p (AP3B1)
42	AP3B1	mmu-miR-16	54.79	291	mmu-miR-16 (AP3B1)

12	AP3D1	mmu-miR-103	661.00	661	mmu-miR-103 (AP3D1)
195	AP3D1	mmu-miR-92a	182.00	182	mmu-miR-92a (AP3D1)
172	AP3S1	mmu-miR-674	5.95	21	mmu-miR-674 (AP3S1)
125	AP3S2	mmu-miR-3473a	239.00	239	mmu-miR-3473a (AP3S2)
12	AP4B1	mmu-miR-103	675.00	675	mmu-miR-103 (AP4B1)
195	ASAH1	mmu-miR-92a	130.50	130.5	mmu-miR-92a (ASAH1)
12	ATP6V0A4	mmu-miR-103	382.00	382	mmu-miR-103 (ATP6V0A4)
195	ATP6V0A4	mmu-miR-92a	285.00	285	mmu-miR-92a (ATP6V0A4)
189	ATP6V0B	mmu-miR-762	13.11	55	mmu-miR-762 (ATP6V0B)
180	ATP6V0C	mmu-miR-705	10.11	61	mmu-miR-705 (ATP6V0C)
195	ATP6V0C	mmu-miR-92a	397.50	397.5	mmu-miR-92a (ATP6V0C)
189	ATP6V0D1	mmu-miR-762	28.33	175	mmu-miR-762 (ATP6V0D1)
40	CD164	mmu-miR-15b	82.99	419	mmu-miR-15b (CD164)
42	CD164	mmu-miR-16	93.86	460	mmu-miR-16 (CD164)
172	CLTA	mmu-miR-674	6.45	25	mmu-miR-674 (CLTA)
189	CLTB	mmu-miR-762	18.05	92	mmu-miR-762 (CLTB)
157	CTSD	mmu-miR-574-5p	2.84	3	mmu-miR-574-5p (CTSD)
142	CTSE	mmu-miR-466i	12.83	47	mmu-miR-466i (CTSE)
137	CTSH	mmu-miR-466f-3p	25.76	125	mmu-miR-466f-3p (CTSH)
195	CTSS	mmu-miR-92a	598.50	598.5	mmu-miR-92a (CTSS)
180	CTSW	mmu-miR-705	11.41	76	mmu-miR-705 (CTSW)
94	CTSZ	mmu-miR-24	93.00	93	mmu-miR-24 (CTSZ)
94	GGA1	mmu-miR-24	505.00	505	mmu-miR-24 (GGA1)
189	GGA1	mmu-miR-762	13.73	58	mmu-miR-762 (GGA1)
24	GGA2	mmu-miR-125b-5p	16.43	57	mmu-miR-125b-5p (GGA2)
182	GGA2	mmu-miR-709	24.38	149	mmu-miR-709 (GGA2)
1	GGA3	mmu-let-7a	23.26	110	mmu-let-7a (GGA3)
3	GGA3	mmu-let-7b	19.01	72	mmu-let-7b (GGA3)
4	GGA3	mmu-let-7c	19.89	77	mmu-let-7c (GGA3)
6	GGA3	mmu-let-7d	8.93	44	mmu-let-7d (GGA3)
7	GGA3	mmu-let-7e	38.46	206	mmu-let-7e (GGA3)
10	GGA3	mmu-let-7i	27.25	134	mmu-let-7i (GGA3)
30	GGA3	mmu-miR-138*	62.00	62	mmu-miR-138* (GGA3)
40	GGA3	mmu-miR-15b	51.94	262	mmu-miR-15b (GGA3)
42	GGA3	mmu-miR-16	82.24	405	mmu-miR-16 (GGA3)
195	GLA	mmu-miR-92a	300.00	300	mmu-miR-92a (GLA)
94	GLB1	mmu-miR-24	15.00	15	mmu-miR-24 (GLB1)
1	GNPTAB	mmu-let-7a	42.75	221	mmu-let-7a (GNPTAB)
3	GNPTAB	mmu-let-7b	38.45	209	mmu-let-7b (GNPTAB)
4	GNPTAB	mmu-let-7c	40.27	215	mmu-let-7c (GNPTAB)
7	GNPTAB	mmu-let-7e	38.19	204	mmu-let-7e (GNPTAB)
10	GNPTAB	mmu-let-7i	44.93	236	mmu-let-7i (GNPTAB)
1	GNS	mmu-let-7a	25.82	128	mmu-let-7a (GNS)

3	GNS	mmu-let-7b	26.50	127	mmu-let-7b (GNS)
4	GNS	mmu-let-7c	26.22	126	mmu-let-7c (GNS)
7	GNS	mmu-let-7e	22.88	101	mmu-let-7e (GNS)
10	GNS	mmu-let-7i	26.01	126	mmu-let-7i (GNS)
94	HEXA	mmu-miR-24	230.00	230	mmu-miR-24 (HEXA)
40	IGF2R	mmu-miR-15b	90.59	447	mmu-miR-15b (IGF2R)
42	IGF2R	mmu-miR-16	86.60	429	mmu-miR-16 (IGF2R)
125	IGF2R	mmu-miR-3473a	387.00	387	mmu-miR-3473a (IGF2R)
16	LAMP2	mmu-miR-107	6.61	25	mmu-miR-107 (LAMP2)
103	LAMP2	mmu-miR-297a	1.60	2	mmu-miR-297a (LAMP2)
13	LAPTM4A	mmu-miR-106a	12.53	49	mmu-miR-106a (LAPTM4A)
43	LAPTM4A	mmu-miR-17	34.18	134	mmu-miR-17 (LAPTM4A)
73	LAPTM4A	mmu-miR-19b	627.00	627	mmu-miR-19b (LAPTM4A)
75	LAPTM4A	mmu-miR-20a	39.21	162	mmu-miR-20a (LAPTM4A)
197	LAPTM4A	mmu-miR-93	61.86	295	mmu-miR-93 (LAPTM4A)
43	M6PR	mmu-miR-17	110.58	443	mmu-miR-17 (M6PR)
75	M6PR	mmu-miR-20a	119.83	457	mmu-miR-20a (M6PR)
197	M6PR	mmu-miR-93	126.86	447	mmu-miR-93 (M6PR)
38	MANBA	mmu-miR-151-5p	2.07	9	mmu-miR-151-5p (MANBA)
94	NAGA	mmu-miR-24	645.50	645.5	mmu-miR-24 (NAGA)
94	NEU1	mmu-miR-24	650.00	650	mmu-miR-24 (NEU1)
40	PLA2G15	mmu-miR-15b	109.11	494	mmu-miR-15b (PLA2G15)
42	PLA2G15	mmu-miR-16	75.85	383	mmu-miR-16 (PLA2G15)
189	PPT2	mmu-miR-762	12.05	48	mmu-miR-762 (PPT2)
44	PSAP	mmu-miR-181a	80.26	358	mmu-miR-181a (PSAP)
94	SCARB2	mmu-miR-24	467.00	467	mmu-miR-24 (SCARB2)
40	SMPD1	mmu-miR-15b	42.08	202	mmu-miR-15b (SMPD1)
42	SMPD1	mmu-miR-16	49.86	260	mmu-miR-16 (SMPD1)
125	SORT1	mmu-miR-3473a	373.00	373	mmu-miR-3473a (SORT1)
182	SORT1	mmu-miR-709	25.35	157	mmu-miR-709 (SORT1)
43	SUMF1	mmu-miR-17	66.07	327	mmu-miR-17 (SUMF1)
59	SUMF1	mmu-miR-1935	76.55	174	mmu-miR-1935 (SUMF1)
75	SUMF1	mmu-miR-20a	87.00	408	mmu-miR-20a (SUMF1)
197	SUMF1	mmu-miR-93	57.78	271	mmu-miR-93 (SUMF1)

Pathway ID	Adjusted P-value	Pathway Name			
401	0.011988	BIOCARTA_VITCB_PATHWAY			
ASSAY ID	Entrez Gene ID	miRNA Name	miRNApath Score	miRNApath Rank	miRNA - Gene
1	COL4A2	mmu-let-7a	41.46	211	mmu-let-7a (COL4A2)
3	COL4A2	mmu-let-7b	45.53	249	mmu-let-7b (COL4A2)
4	COL4A2	mmu-let-7c	46.17	248	mmu-let-7c (COL4A2)
7	COL4A2	mmu-let-7e	51.07	255	mmu-let-7e (COL4A2)
43	COL4A3	mmu-miR-17	66.99	328	mmu-miR-17 (COL4A3)
75	COL4A3	mmu-miR-20a	70.98	349	mmu-miR-20a (COL4A3)
197	COL4A3	mmu-miR-93	82.66	376	mmu-miR-93 (COL4A3)
137	COL4A5	mmu-miR-466f-3p	11.08	36	mmu-miR-466f-3p (COL4A5)
148	COL4A5	mmu-miR-467f	13.77	43	mmu-miR-467f (COL4A5)
139	P4HB	mmu-miR-466f	3.33	19	mmu-miR-466f (P4HB)
138	P4HB	mmu-miR-466f-5p	3.33	19	mmu-miR-466f-5p (P4HB)
58	SLC23A2	mmu-miR-1931	21.36	81	mmu-miR-1931 (SLC23A2)
148	SLC23A2	mmu-miR-467f	14.59	47	mmu-miR-467f (SLC23A2)
44	SLC2A3	mmu-miR-181a	79.45	354	mmu-miR-181a (SLC2A3)
45	SLC2A3	mmu-miR-181b	85.85	382	mmu-miR-181b (SLC2A3)

Pathway ID	Adjusted P-value	Pathway Name			
458	0.011988	PID_AURORA_B_PATHWAY			
ASSAY ID	Entrez Gene ID	miRNA Name	miRNApath Score	miRNApath Rank	miRNA - Gene
12	AURKA	mmu-miR-103	326.00	326	mmu-miR-103 (AURKA)
44	AURKB	mmu-miR-181a	19.38	65	mmu-miR-181a (AURKB)
45	AURKB	mmu-miR-181b	33.07	140	mmu-miR-181b (AURKB)
137	AURKB	mmu-miR-466f-3p	20.43	91	mmu-miR-466f-3p (AURKB)
140	AURKB	mmu-miR-466g	18.39	88	mmu-miR-466g (AURKB)
73	BIRC5	mmu-miR-19b	584.50	584.5	mmu-miR-19b (BIRC5)
195	BIRC5	mmu-miR-92a	518.00	518	mmu-miR-92a (BIRC5)
1	CBX5	mmu-let-7a	19.74	77	mmu-let-7a (CBX5)
3	CBX5	mmu-let-7b	25.03	115	mmu-let-7b (CBX5)
4	CBX5	mmu-let-7c	22.21	94	mmu-let-7c (CBX5)
7	CBX5	mmu-let-7e	17.96	67	mmu-let-7e (CBX5)
10	CBX5	mmu-let-7i	24.32	111	mmu-let-7i (CBX5)
125	CBX5	mmu-miR-3473a	455.00	455	mmu-miR-3473a (CBX5)
174	CBX5	mmu-miR-690	13.05	75	mmu-miR-690 (CBX5)
182	CBX5	mmu-miR-709	6.23	8	mmu-miR-709 (CBX5)
73	CENPA	mmu-miR-19b	663.00	663	mmu-miR-19b (CENPA)
44	CUL3	mmu-miR-181a	79.37	353	mmu-miR-181a (CUL3)

45	CUL3	mmu-miR-181b	89.55	391	mmu-miR-181b (CUL3)
30	INCENP	mmu-miR-138*	123.00	123	mmu-miR-138* (INCENP)
40	KIF23	mmu-miR-15b	34.66	154	mmu-miR-15b (KIF23)
42	KIF23	mmu-miR-16	33.26	142	mmu-miR-16 (KIF23)
43	KIF23	mmu-miR-17	41.38	182	mmu-miR-17 (KIF23)
75	KIF23	mmu-miR-20a	36.66	150	mmu-miR-20a (KIF23)
197	KIF23	mmu-miR-93	49.65	229	mmu-miR-93 (KIF23)
1	KLHL13	mmu-let-7a	80.03	316	mmu-let-7a (KLHL13)
3	KLHL13	mmu-let-7b	80.76	323	mmu-let-7b (KLHL13)
4	KLHL13	mmu-let-7c	80.62	327	mmu-let-7c (KLHL13)
7	KLHL13	mmu-let-7e	76.81	305	mmu-let-7e (KLHL13)
10	KLHL13	mmu-let-7i	80.57	325	mmu-let-7i (KLHL13)
18	KLHL13	mmu-miR-1187	5.90	18	mmu-miR-1187 (KLHL13)
148	KLHL13	mmu-miR-467f	55.29	207	mmu-miR-467f (KLHL13)
182	KLHL9	mmu-miR-709	46.12	250	mmu-miR-709 (KLHL9)
94	PEBP1	mmu-miR-24	255.00	255	mmu-miR-24 (PEBP1)
30	PPP1CC	mmu-miR-138*	100.50	100.5	mmu-miR-138* (PPP1CC)
73	PPP1CC	mmu-miR-19b	459.50	459.5	mmu-miR-19b (PPP1CC)
112	RASA1	mmu-miR-31	14.90	95	mmu-miR-31 (RASA1)
27	RHOA	mmu-miR-130b	12.79	63	mmu-miR-130b (RHOA)
140	SMC4	mmu-miR-466g	6.47	19	mmu-miR-466g (SMC4)
49	STMN1	mmu-miR-1894-5p	3.04	5	mmu-miR-1894-5p (STMN1)
96	STMN1	mmu-miR-26a	46.56	239	mmu-miR-26a (STMN1)
112	TACC1	mmu-miR-31	14.27	90	mmu-miR-31 (TACC1)
195	VIM	mmu-miR-92a	139.50	139.5	mmu-miR-92a (VIM)

Pathway ID      Adjusted P-value      Pathway Name  
1244      0.012987      REACTOME\_INNATE\_IMMUNE\_SYSTEM

ASSAY ID	Entrez Gene ID	miRNA Name	miRNApath Score	miRNApath Rank	miRNA - Gene
43	APP	mmu-miR-17	32.93	123	mmu-miR-17 (APP)
75	APP	mmu-miR-20a	24.75	82	mmu-miR-20a (APP)
58	ATF2	mmu-miR-1931	17.40	78	mmu-miR-1931 (ATF2)
96	ATF2	mmu-miR-26a	28.79	138	mmu-miR-26a (ATF2)
26	ATG5	mmu-miR-130a	2.07	8	mmu-miR-130a (ATG5)
44	ATG5	mmu-miR-181a	26.41	102	mmu-miR-181a (ATG5)
45	ATG5	mmu-miR-181b	24.63	97	mmu-miR-181b (ATG5)
140	BCL2L1	mmu-miR-466g	8.37	37	mmu-miR-466g (BCL2L1)
174	BTK	mmu-miR-690	9.92	55.5	mmu-miR-690 (BTK)
73	C6	mmu-miR-19b	129.00	129	mmu-miR-19b (C6)
195	C8A	mmu-miR-92a	468.50	468.5	mmu-miR-92a (C8A)
73	C8B	mmu-miR-19b	398.00	398	mmu-miR-19b (C8B)



12	CAPZA2	mmu-miR-103	542.00	542	mmu-miR-103 (CAPZA2)
94	CARD9	mmu-miR-24	557.00	557	mmu-miR-24 (CARD9)
12	CASP1	mmu-miR-103	429.50	429.5	mmu-miR-103 (CASP1)
13	CASP8	mmu-miR-106a	9.36	35	mmu-miR-106a (CASP8)
43	CASP8	mmu-miR-17	18.29	53	mmu-miR-17 (CASP8)
75	CASP8	mmu-miR-20a	20.25	63	mmu-miR-20a (CASP8)
44	CD4	mmu-miR-181a	78.24	346	mmu-miR-181a (CD4)
45	CD4	mmu-miR-181b	61.50	290	mmu-miR-181b (CD4)
12	CFI	mmu-miR-103	675.00	675	mmu-miR-103 (CFI)
59	CNPY3	mmu-miR-1935	64.41	159	mmu-miR-1935 (CNPY3)
43	CREB1	mmu-miR-17	8.77	9	mmu-miR-17 (CREB1)
44	CREB1	mmu-miR-181a	32.87	134	mmu-miR-181a (CREB1)
45	CREB1	mmu-miR-181b	50.29	237	mmu-miR-181b (CREB1)
75	CREB1	mmu-miR-20a	14.64	35	mmu-miR-20a (CREB1)
96	CREB1	mmu-miR-26a	35.79	188	mmu-miR-26a (CREB1)
197	CREB1	mmu-miR-93	16.90	45	mmu-miR-93 (CREB1)
195	CTSS	mmu-miR-92a	598.50	598.5	mmu-miR-92a (CTSS)
16	CYLD	mmu-miR-107	1.59	3	mmu-miR-107 (CYLD)
3	DDOST	mmu-let-7b	57.90	291	mmu-let-7b (DDOST)
10	DDOST	mmu-let-7i	54.88	277	mmu-let-7i (DDOST)
12	DEFA1	mmu-miR-103	242.00	242	mmu-miR-103 (DEFA1)
12	DEFA3	mmu-miR-103	242.00	242	mmu-miR-103 (DEFA3)
12	DEFA6	mmu-miR-103	242.00	242	mmu-miR-103 (DEFA6)
12	DHX58	mmu-miR-103	502.50	502.5	mmu-miR-103 (DHX58)
195	DHX58	mmu-miR-92a	691.50	691.5	mmu-miR-92a (DHX58)
125	DNM1	mmu-miR-3473a	524.00	524	mmu-miR-3473a (DNM1)
182	DNM1	mmu-miR-709	41.28	232	mmu-miR-709 (DNM1)
94	DNM2	mmu-miR-24	674.00	674	mmu-miR-24 (DNM2)
197	DNM2	mmu-miR-93	70.06	332	mmu-miR-93 (DNM2)
40	DUSP3	mmu-miR-15b	47.81	238	mmu-miR-15b (DUSP3)
42	DUSP3	mmu-miR-16	43.62	217	mmu-miR-16 (DUSP3)
125	DUSP4	mmu-miR-3473a	462.00	462	mmu-miR-3473a (DUSP4)
27	DUSP6	mmu-miR-130b	11.58	59	mmu-miR-130b (DUSP6)
112	DUSP7	mmu-miR-31	8.95	42	mmu-miR-31 (DUSP7)
142	DUSP7	mmu-miR-466i	27.06	91	mmu-miR-466i (DUSP7)
1	EEA1	mmu-let-7a	22.34	101	mmu-let-7a (EEA1)
3	EEA1	mmu-let-7b	36.82	197	mmu-let-7b (EEA1)
4	EEA1	mmu-let-7c	40.02	214	mmu-let-7c (EEA1)
7	EEA1	mmu-let-7e	38.67	209	mmu-let-7e (EEA1)
10	EEA1	mmu-let-7i	33.58	178	mmu-let-7i (EEA1)
43	EEA1	mmu-miR-17	44.42	198	mmu-miR-17 (EEA1)
75	EEA1	mmu-miR-20a	52.37	257	mmu-miR-20a (EEA1)
197	EEA1	mmu-miR-93	62.48	300	mmu-miR-93 (EEA1)

46	ELK1	mmu-miR-1892	1.75	2	mmu-miR-1892 (ELK1)
49	ELK1	mmu-miR-1894-5p	6.54	18	mmu-miR-1894-5p (ELK1)
30	EP300	mmu-miR-138*	232.00	232	mmu-miR-138* (EP300)
165	EP300	mmu-miR-669e	3.73	14	mmu-miR-669e (EP300)
44	FOS	mmu-miR-181a	28.65	113	mmu-miR-181a (FOS)
46	HMGB1	mmu-miR-1892	5.04	21	mmu-miR-1892 (HMGB1)
94	HSP90AB1	mmu-miR-24	144.00	144	mmu-miR-24 (HSP90AB1)
44	HSP90B1	mmu-miR-181a	22.65	80	mmu-miR-181a (HSP90B1)
45	HSP90B1	mmu-miR-181b	47.04	218	mmu-miR-181b (HSP90B1)
137	HSP90B1	mmu-miR-466f-3p	21.20	96	mmu-miR-466f-3p (HSP90B1)
148	HSP90B1	mmu-miR-467f	20.29	90	mmu-miR-467f (HSP90B1)
195	IFIH1	mmu-miR-92a	464.00	464	mmu-miR-92a (IFIH1)
195	IFNA14	mmu-miR-92a	332.00	332	mmu-miR-92a (IFNA14)
1	IKBKE	mmu-let-7a	43.83	229	mmu-let-7a (IKBKE)
3	IKBKE	mmu-let-7b	38.28	205	mmu-let-7b (IKBKE)
4	IKBKE	mmu-let-7c	30.69	148	mmu-let-7c (IKBKE)
6	IKBKE	mmu-let-7d	13.94	70	mmu-let-7d (IKBKE)
7	IKBKE	mmu-let-7e	27.89	145	mmu-let-7e (IKBKE)
10	IKBKE	mmu-let-7i	43.43	224	mmu-let-7i (IKBKE)
12	IKBKE	mmu-miR-103	419.00	419	mmu-miR-103 (IKBKE)
30	IRAK1	mmu-miR-138*	408.00	408	mmu-miR-138* (IRAK1)
73	IRAK3	mmu-miR-19b	303.50	303.5	mmu-miR-19b (IRAK3)
195	IRAK4	mmu-miR-92a	639.00	639	mmu-miR-92a (IRAK4)
125	IRF1	mmu-miR-3473a	636.00	636	mmu-miR-3473a (IRF1)
189	IRF2	mmu-miR-762	15.24	74	mmu-miR-762 (IRF2)
75	LBP	mmu-miR-20a	23.08	76	mmu-miR-20a (LBP)
40	MAP2K1	mmu-miR-15b	22.88	76	mmu-miR-15b (MAP2K1)
42	MAP2K1	mmu-miR-16	50.16	262	mmu-miR-16 (MAP2K1)
44	MAP2K1	mmu-miR-181a	48.03	222	mmu-miR-181a (MAP2K1)
45	MAP2K1	mmu-miR-181b	87.59	389	mmu-miR-181b (MAP2K1)
73	MAP2K1	mmu-miR-19b	583.00	583	mmu-miR-19b (MAP2K1)
40	MAP2K3	mmu-miR-15b	122.00	508	mmu-miR-15b (MAP2K3)
42	MAP2K3	mmu-miR-16	118.74	495	mmu-miR-16 (MAP2K3)
140	MAP2K4	mmu-miR-466g	1.67	1	mmu-miR-466g (MAP2K4)
106	MAP2K6	mmu-miR-3072*	2.57	9	mmu-miR-3072* (MAP2K6)
1	MAP3K1	mmu-let-7a	22.34	102	mmu-let-7a (MAP3K1)
3	MAP3K1	mmu-let-7b	19.78	78	mmu-let-7b (MAP3K1)
4	MAP3K1	mmu-let-7c	21.95	91	mmu-let-7c (MAP3K1)
7	MAP3K1	mmu-let-7e	20.24	81	mmu-let-7e (MAP3K1)
10	MAP3K1	mmu-let-7i	24.13	109	mmu-let-7i (MAP3K1)
96	MAP3K1	mmu-miR-26a	59.62	281	mmu-miR-26a (MAP3K1)
112	MAP3K1	mmu-miR-31	15.30	100	mmu-miR-31 (MAP3K1)
44	MAPK1	mmu-miR-181a	60.89	287	mmu-miR-181a (MAPK1)

45	MAPK1	mmu-miR-181b	66.76	315	mmu-miR-181b (MAPK1)
140	MAPK10	mmu-miR-466g	4.43	8	mmu-miR-466g (MAPK10)
30	MAPK12	mmu-miR-138*	126.00	126	mmu-miR-138* (MAPK12)
171	MAPK12	mmu-miR-671-5p	17.81	87	mmu-miR-671-5p (MAPK12)
49	MAPK14	mmu-miR-1894-5p	1.91	3	mmu-miR-1894-5p (MAPK14)
30	MAPK3	mmu-miR-138*	470.00	470	mmu-miR-138* (MAPK3)
41	MAPK3	mmu-miR-16*	279.50	279.5	mmu-miR-16* (MAPK3)
12	MAPK7	mmu-miR-103	687.00	687	mmu-miR-103 (MAPK7)
30	MAPK7	mmu-miR-138*	48.00	48	mmu-miR-138* (MAPK7)
94	MAPK7	mmu-miR-24	344.50	344.5	mmu-miR-24 (MAPK7)
195	MAPK7	mmu-miR-92a	453.00	453	mmu-miR-92a (MAPK7)
1	MAPK8	mmu-let-7a	48.26	253	mmu-let-7a (MAPK8)
3	MAPK8	mmu-let-7b	41.97	225	mmu-let-7b (MAPK8)
4	MAPK8	mmu-let-7c	28.92	138	mmu-let-7c (MAPK8)
7	MAPK8	mmu-let-7e	43.62	228	mmu-let-7e (MAPK8)
10	MAPK8	mmu-let-7i	34.44	186	mmu-let-7i (MAPK8)
12	MAPK8	mmu-miR-103	635.00	635	mmu-miR-103 (MAPK8)
27	MAPK8	mmu-miR-130b	15.92	71	mmu-miR-130b (MAPK8)
40	MAPK8	mmu-miR-15b	16.83	41	mmu-miR-15b (MAPK8)
42	MAPK8	mmu-miR-16	15.16	38	mmu-miR-16 (MAPK8)
68	MAPK8	mmu-miR-1949	8.17	41	mmu-miR-1949 (MAPK8)
162	MAPK8	mmu-miR-669b	4.82	11	mmu-miR-669b (MAPK8)
12	MAPK9	mmu-miR-103	348.50	348.5	mmu-miR-103 (MAPK9)
43	MAPK9	mmu-miR-17	40.15	168	mmu-miR-17 (MAPK9)
75	MAPK9	mmu-miR-20a	66.01	326	mmu-miR-20a (MAPK9)
197	MAPK9	mmu-miR-93	27.83	100	mmu-miR-93 (MAPK9)
94	MAPKAPK2	mmu-miR-24	145.00	145	mmu-miR-24 (MAPKAPK2)
12	MAPKAPK3	mmu-miR-103	304.00	304	mmu-miR-103 (MAPKAPK3)
1	MASP1	mmu-let-7a	34.45	175	mmu-let-7a (MASP1)
3	MASP1	mmu-let-7b	31.72	158	mmu-let-7b (MASP1)
4	MASP1	mmu-let-7c	31.24	154	mmu-let-7c (MASP1)
6	MASP1	mmu-let-7d	11.30	56	mmu-let-7d (MASP1)
7	MASP1	mmu-let-7e	35.96	191	mmu-let-7e (MASP1)
10	MASP1	mmu-let-7i	34.70	187	mmu-let-7i (MASP1)
73	NFKBIA	mmu-miR-19b	80.00	80	mmu-miR-19b (NFKBIA)
40	NLRX1	mmu-miR-15b	63.04	334	mmu-miR-15b (NLRX1)
42	NLRX1	mmu-miR-16	71.36	366	mmu-miR-16 (NLRX1)
171	NLRX1	mmu-miR-671-5p	4.90	12	mmu-miR-671-5p (NLRX1)
94	OTUD5	mmu-miR-24	348.50	348.5	mmu-miR-24 (OTUD5)
115	OTUD5	mmu-miR-328	10.55	45	mmu-miR-328 (OTUD5)
125	P2RX7	mmu-miR-3473a	353.00	353	mmu-miR-3473a (P2RX7)
172	PELI1	mmu-miR-674	12.15	68	mmu-miR-674 (PELI1)
12	PELI2	mmu-miR-103	551.00	551	mmu-miR-103 (PELI2)

40	PELI2	mmu-miR-15b	64.40	341	mmu-miR-15b (PELI2)
42	PELI2	mmu-miR-16	60.43	317	mmu-miR-16 (PELI2)
96	PELI2	mmu-miR-26a	34.33	178	mmu-miR-26a (PELI2)
42	PELI3	mmu-miR-16	38.18	175	mmu-miR-16 (PELI3)
12	PIK3R4	mmu-miR-103	314.50	314.5	mmu-miR-103 (PIK3R4)
94	PIK3R4	mmu-miR-24	480.50	480.5	mmu-miR-24 (PIK3R4)
40	PPP2R1A	mmu-miR-15b	44.01	210	mmu-miR-15b (PPP2R1A)
42	PPP2R1A	mmu-miR-16	48.40	247	mmu-miR-16 (PPP2R1A)
125	PPP2R1B	mmu-miR-3473a	95.00	95	mmu-miR-3473a (PPP2R1B)
94	PYCARD	mmu-miR-24	396.00	396	mmu-miR-24 (PYCARD)
12	RNF125	mmu-miR-103	44.00	44	mmu-miR-103 (RNF125)
41	RNF125	mmu-miR-16*	325.00	325	mmu-miR-16* (RNF125)
24	RPS6KA1	mmu-miR-125b-5p	35.79	204	mmu-miR-125b-5p (RPS6KA1)
56	RPS6KA1	mmu-miR-191	2.79	19	mmu-miR-191 (RPS6KA1)
189	RPS6KA1	mmu-miR-762	35.56	226	mmu-miR-762 (RPS6KA1)
197	RPS6KA1	mmu-miR-93	80.19	369	mmu-miR-93 (RPS6KA1)
43	RPS6KA5	mmu-miR-17	19.82	61	mmu-miR-17 (RPS6KA5)
75	RPS6KA5	mmu-miR-20a	21.19	67	mmu-miR-20a (RPS6KA5)
197	RPS6KA5	mmu-miR-93	29.11	115	mmu-miR-93 (RPS6KA5)
94	TAB1	mmu-miR-24	664.00	664	mmu-miR-24 (TAB1)
40	TAB3	mmu-miR-15b	59.30	309	mmu-miR-15b (TAB3)
42	TAB3	mmu-miR-16	48.68	248	mmu-miR-16 (TAB3)
44	TAB3	mmu-miR-181a	44.97	204	mmu-miR-181a (TAB3)
45	TAB3	mmu-miR-181b	78.84	367	mmu-miR-181b (TAB3)
96	TAB3	mmu-miR-26a	55.56	269	mmu-miR-26a (TAB3)
137	TANK	mmu-miR-466f-3p	26.56	128	mmu-miR-466f-3p (TANK)
73	TBK1	mmu-miR-19b	625.00	625	mmu-miR-19b (TBK1)
12	TICAM1	mmu-miR-103	408.00	408	mmu-miR-103 (TICAM1)
30	TICAM1	mmu-miR-138*	173.00	173	mmu-miR-138* (TICAM1)
195	TICAM2	mmu-miR-92a	352.00	352	mmu-miR-92a (TICAM2)
41	TLR2	mmu-miR-16*	183.00	183	mmu-miR-16* (TLR2)
40	TRAF3	mmu-miR-15b	10.60	15	mmu-miR-15b (TRAF3)
42	TRAF3	mmu-miR-16	9.29	13	mmu-miR-16 (TRAF3)
41	TRAF3	mmu-miR-16*	23.00	23	mmu-miR-16* (TRAF3)
113	TRAF3	mmu-miR-320	0.87	1	mmu-miR-320 (TRAF3)
125	TRAF3	mmu-miR-3473a	284.00	284	mmu-miR-3473a (TRAF3)
13	TXNIP	mmu-miR-106a	11.15	43	mmu-miR-106a (TXNIP)
43	TXNIP	mmu-miR-17	5.83	5	mmu-miR-17 (TXNIP)
75	TXNIP	mmu-miR-20a	10.05	16	mmu-miR-20a (TXNIP)
182	TXNIP	mmu-miR-709	9.04	23	mmu-miR-709 (TXNIP)
197	TXNIP	mmu-miR-93	4.75	2	mmu-miR-93 (TXNIP)
30	UBA7	mmu-miR-138*	69.50	69.5	mmu-miR-138* (UBA7)

94	UBA7	mmu-miR-24	133.50	133.5	mmu-miR-24 (UBA7)
96	UBE2D1	mmu-miR-26a	53.30	263	mmu-miR-26a (UBE2D1)
162	UBE2D1	mmu-miR-669b	21.61	120	mmu-miR-669b (UBE2D1)
174	UBE2D1	mmu-miR-690	11.40	66	mmu-miR-690 (UBE2D1)
112	UBE2K	mmu-miR-31	10.38	51	mmu-miR-31 (UBE2K)
44	UBE2N	mmu-miR-181a	24.82	96	mmu-miR-181a (UBE2N)
45	UBE2N	mmu-miR-181b	35.38	151	mmu-miR-181b (UBE2N)
41	ZBP1	mmu-miR-16*	264.00	264	mmu-miR-16* (ZBP1)

Pathway ID      Adjusted P-value      Pathway Name  
6              0.013986      KEGG\_GALACTOSE\_METABOLISM

ASSAY ID	Entrez Gene ID	miRNA Name	miRNApath Score	miRNApath Rank	miRNA - Gene
40	B4GALT1	mmu-miR-15b	82.34	414	mmu-miR-15b (B4GALT1)
42	B4GALT1	mmu-miR-16	75.79	382	mmu-miR-16 (B4GALT1)
44	B4GALT1	mmu-miR-181a	68.81	312	mmu-miR-181a (B4GALT1)
45	B4GALT1	mmu-miR-181b	65.16	306	mmu-miR-181b (B4GALT1)
59	B4GALT1	mmu-miR-1935	45.55	113	mmu-miR-1935 (B4GALT1)
106	B4GALT2	mmu-miR-3072*	1.04	1	mmu-miR-3072* (B4GALT2)
189	B4GALT2	mmu-miR-762	6.21	11	mmu-miR-762 (B4GALT2)
30	G6PC	mmu-miR-138*	215.00	215	mmu-miR-138* (G6PC)
125	G6PC	mmu-miR-3473a	270.00	270	mmu-miR-3473a (G6PC)
1	GALE	mmu-let-7a	26.69	132	mmu-let-7a (GALE)
3	GALE	mmu-let-7b	40.81	219	mmu-let-7b (GALE)
4	GALE	mmu-let-7c	32.56	168	mmu-let-7c (GALE)
7	GALE	mmu-let-7e	14.24	50	mmu-let-7e (GALE)
10	GALE	mmu-let-7i	47.30	254	mmu-let-7i (GALE)
30	GALK1	mmu-miR-138*	331.50	331.5	mmu-miR-138* (GALK1)
30	GALT	mmu-miR-138*	27.00	27	mmu-miR-138* (GALT)
195	GLA	mmu-miR-92a	300.00	300	mmu-miR-92a (GLA)
94	GLB1	mmu-miR-24	15.00	15	mmu-miR-24 (GLB1)
94	LALBA	mmu-miR-24	564.00	564	mmu-miR-24 (LALBA)
40	PFKL	mmu-miR-15b	32.00	133	mmu-miR-15b (PFKL)
42	PFKL	mmu-miR-16	29.44	118	mmu-miR-16 (PFKL)
94	PFKL	mmu-miR-24	282.00	282	mmu-miR-24 (PFKL)
75	PFKP	mmu-miR-20a	51.28	248	mmu-miR-20a (PFKP)
125	PFKP	mmu-miR-3473a	518.00	518	mmu-miR-3473a (PFKP)
41	PGM1	mmu-miR-16*	334.00	334	mmu-miR-16* (PGM1)
40	PGM2	mmu-miR-15b	65.15	344	mmu-miR-15b (PGM2)
42	PGM2	mmu-miR-16	28.69	115	mmu-miR-16 (PGM2)
195	UGP2	mmu-miR-92a	322.00	322	mmu-miR-92a (UGP2)

Pathway ID	Adjusted P-value	Pathway Name			
719	0.013986	REACTOME_DEFENSINS			
ASSAY ID	Entrez Gene ID	miRNA Name	miRNApath Score	miRNApath Rank	miRNA - Gene
44	CD4	mmu-miR-181a	78.24	346	mmu-miR-181a (CD4)
45	CD4	mmu-miR-181b	61.50	290	mmu-miR-181b (CD4)
12	DEFA1	mmu-miR-103	242.00	242	mmu-miR-103 (DEFA1)
12	DEFA3	mmu-miR-103	242.00	242	mmu-miR-103 (DEFA3)
12	DEFA6	mmu-miR-103	242.00	242	mmu-miR-103 (DEFA6)
41	TLR2	mmu-miR-16*	183.00	183	mmu-miR-16* (TLR2)

Pathway ID	Adjusted P-value	Pathway Name			
792	0.013986	REACTOME_THE_ACTIVATION_OF_ARYLSULFATASES			
ASSAY ID	Entrez Gene ID	miRNA Name	miRNApath Score	miRNApath Rank	miRNA - Gene
94	ARSI	mmu-miR-24	342.00	342	mmu-miR-24 (ARSI)
44	ARSJ	mmu-miR-181a	41.17	182	mmu-miR-181a (ARSJ)
45	ARSJ	mmu-miR-181b	20.62	73	mmu-miR-181b (ARSJ)
43	SUMF1	mmu-miR-17	66.07	327	mmu-miR-17 (SUMF1)
59	SUMF1	mmu-miR-1935	76.55	174	mmu-miR-1935 (SUMF1)
75	SUMF1	mmu-miR-20a	87.00	408	mmu-miR-20a (SUMF1)
197	SUMF1	mmu-miR-93	57.78	271	mmu-miR-93 (SUMF1)
125	SUMF2	mmu-miR-3473a	234.00	234	mmu-miR-3473a (SUMF2)

Pathway ID	Adjusted P-value	Pathway Name
1173	0.013986	REACTOME_ACTIVATION_OF_IRF3_IRF7_MEDIATED_BY_TBK1_IKK_EPSILON

ASSAY ID	Entrez Gene ID	miRNA Name	miRNApath Score	miRNApath Rank	miRNA - Gene
1	IKBKE	mmu-let-7a	43.83	229	mmu-let-7a (IKBKE)
3	IKBKE	mmu-let-7b	38.28	205	mmu-let-7b (IKBKE)
4	IKBKE	mmu-let-7c	30.69	148	mmu-let-7c (IKBKE)
6	IKBKE	mmu-let-7d	13.94	70	mmu-let-7d (IKBKE)
7	IKBKE	mmu-let-7e	27.89	145	mmu-let-7e (IKBKE)
10	IKBKE	mmu-let-7i	43.43	224	mmu-let-7i (IKBKE)
12	IKBKE	mmu-miR-103	419.00	419	mmu-miR-103 (IKBKE)
73	TBK1	mmu-miR-19b	625.00	625	mmu-miR-19b (TBK1)
12	TICAM1	mmu-miR-103	408.00	408	mmu-miR-103 (TICAM1)
30	TICAM1	mmu-miR-138*	173.00	173	mmu-miR-138* (TICAM1)
195	TICAM2	mmu-miR-92a	352.00	352	mmu-miR-92a (TICAM2)
40	TRAF3	mmu-miR-15b	10.60	15	mmu-miR-15b (TRAF3)
42	TRAF3	mmu-miR-16	9.29	13	mmu-miR-16 (TRAF3)
41	TRAF3	mmu-miR-16*	23.00	23	mmu-miR-16* (TRAF3)
113	TRAF3	mmu-miR-320	0.87	1	mmu-miR-320 (TRAF3)
125	TRAF3	mmu-miR-3473a	284.00	284	mmu-miR-3473a (TRAF3)

Pathway ID	Adjusted P-value	Pathway Name
281	0.015984	BIOCARTA_IL5_PATHWAY

ASSAY ID	Entrez Gene ID	miRNA Name	miRNApath Score	miRNApath Rank	miRNA - Gene
73	CCL11	mmu-miR-19b	137.00	137	mmu-miR-19b (CCL11)
44	CD4	mmu-miR-181a	78.24	346	mmu-miR-181a (CD4)
45	CD4	mmu-miR-181b	61.50	290	mmu-miR-181b (CD4)
94	IL4	mmu-miR-24	193.50	193.5	mmu-miR-24 (IL4)
1	IL6	mmu-let-7a	19.58	74	mmu-let-7a (IL6)
3	IL6	mmu-let-7b	28.65	141	mmu-let-7b (IL6)
4	IL6	mmu-let-7c	22.49	96	mmu-let-7c (IL6)
7	IL6	mmu-let-7e	19.62	78	mmu-let-7e (IL6)
10	IL6	mmu-let-7i	20.96	84	mmu-let-7i (IL6)
44	IL6	mmu-miR-181a	11.79	30	mmu-miR-181a (IL6)
45	IL6	mmu-miR-181b	11.04	22	mmu-miR-181b (IL6)

Pathway ID	Adjusted P-value	Pathway Name			
428	0.015984	ST_STAT3_PATHWAY			
ASSAY ID	Entrez Gene ID	miRNA Name	miRNApath Score	miRNApath Rank	miRNA - Gene
1	IL6	mmu-let-7a	19.58	74	mmu-let-7a (IL6)
3	IL6	mmu-let-7b	28.65	141	mmu-let-7b (IL6)
4	IL6	mmu-let-7c	22.49	96	mmu-let-7c (IL6)
7	IL6	mmu-let-7e	19.62	78	mmu-let-7e (IL6)
10	IL6	mmu-let-7i	20.96	84	mmu-let-7i (IL6)
44	IL6	mmu-miR-181a	11.79	30	mmu-miR-181a (IL6)
45	IL6	mmu-miR-181b	11.04	22	mmu-miR-181b (IL6)
13	JAK1	mmu-miR-106a	14.51	57	mmu-miR-106a (JAK1)
43	JAK1	mmu-miR-17	42.24	185	mmu-miR-17 (JAK1)
75	JAK1	mmu-miR-20a	34.05	133	mmu-miR-20a (JAK1)
125	JAK1	mmu-miR-3473a	645.00	645	mmu-miR-3473a (JAK1)
44	PIAS3	mmu-miR-181a	50.32	236	mmu-miR-181a (PIAS3)
45	PIAS3	mmu-miR-181b	42.16	189	mmu-miR-181b (PIAS3)
1	PTPRU	mmu-let-7a	42.57	219	mmu-let-7a (PTPRU)
73	PTPRU	mmu-miR-19b	665.00	665	mmu-miR-19b (PTPRU)
43	STAT3	mmu-miR-17	49.66	233	mmu-miR-17 (STAT3)
75	STAT3	mmu-miR-20a	53.60	265	mmu-miR-20a (STAT3)
174	STAT3	mmu-miR-690	8.28	45	mmu-miR-690 (STAT3)
197	STAT3	mmu-miR-93	45.91	212	mmu-miR-93 (STAT3)
Pathway ID	Adjusted P-value	Pathway Name			
1089	0.017982	REACTOME_SYNTHESIS_AND_INTERCONVERSION_OF_NUCLEOTIDE_DI_AND_TRIPHOSPHATES			
ASSAY ID	Entrez Gene ID	miRNA Name	miRNApath Score	miRNApath Rank	miRNA - Gene
58	CTPS	mmu-miR-1931	8.05	39	mmu-miR-1931 (CTPS)
140	CTPS	mmu-miR-466g	22.81	101	mmu-miR-466g (CTPS)
195	DTYMK	mmu-miR-92a	559.50	559.5	mmu-miR-92a (DTYMK)
1	NME4	mmu-let-7a	12.52	35	mmu-let-7a (NME4)
3	NME4	mmu-let-7b	13.14	32	mmu-let-7b (NME4)
4	NME4	mmu-let-7c	13.01	37	mmu-let-7c (NME4)
6	NME4	mmu-let-7d	3.68	6	mmu-let-7d (NME4)
7	NME4	mmu-let-7e	13.23	39	mmu-let-7e (NME4)
10	NME4	mmu-let-7i	13.02	35	mmu-let-7i (NME4)
41	NME4	mmu-miR-16*	293.00	293	mmu-miR-16* (NME4)
189	NME4	mmu-miR-762	4.45	4	mmu-miR-762 (NME4)
1	RRM2	mmu-let-7a	70.21	308	mmu-let-7a (RRM2)
3	RRM2	mmu-let-7b	70.15	313	mmu-let-7b (RRM2)



4	RRM2	mmu-let-7c	71.61	323	mmu-let-7c (RRM2)
7	RRM2	mmu-let-7e	62.88	289	mmu-let-7e (RRM2)
10	RRM2	mmu-let-7i	41.52	217	mmu-let-7i (RRM2)
13	RRM2	mmu-miR-106a	25.89	108	mmu-miR-106a (RRM2)
75	RRM2	mmu-miR-20a	118.61	456	mmu-miR-20a (RRM2)
197	RRM2	mmu-miR-93	79.13	362	mmu-miR-93 (RRM2)
24	TXNRD1	mmu-miR-125b-5p	85.04	311	mmu-miR-125b-5p (TXNRD1)

Pathway ID	Adjusted P-value	Pathway Name
9	0.01998	KEGG_STEROID_BIOSYNTHESIS

ASSAY ID	Entrez Gene ID	miRNA Name	miRNApath Score	miRNApath Rank	miRNA - Gene
103	CEL	mmu-miR-297a	3.02	8	mmu-miR-297a (CEL)
40	HSD17B7	mmu-miR-15b	49.15	244	mmu-miR-15b (HSD17B7)
42	HSD17B7	mmu-miR-16	50.47	264	mmu-miR-16 (HSD17B7)
125	NSDHL	mmu-miR-3473a	355.00	355	mmu-miR-3473a (NSDHL)
1	SOAT2	mmu-let-7a	12.46	33	mmu-let-7a (SOAT2)
3	SOAT2	mmu-let-7b	9.06	19	mmu-let-7b (SOAT2)
4	SOAT2	mmu-let-7c	8.90	15	mmu-let-7c (SOAT2)
6	SOAT2	mmu-let-7d	7.14	28	mmu-let-7d (SOAT2)
7	SOAT2	mmu-let-7e	12.51	35	mmu-let-7e (SOAT2)
10	SOAT2	mmu-let-7i	13.21	36	mmu-let-7i (SOAT2)
195	SQLE	mmu-miR-92a	489.00	489	mmu-miR-92a (SQLE)

Pathway ID	Adjusted P-value	Pathway Name
56	0.01998	KEGG_RIBOFLAVIN_METABOLISM

ASSAY ID	Entrez Gene ID	miRNA Name	miRNApath Score	miRNApath Rank	miRNA - Gene
182	ACP2	mmu-miR-709	41.48	236	mmu-miR-709 (ACP2)
189	ACP2	mmu-miR-762	30.57	190	mmu-miR-762 (ACP2)
73	ENPP1	mmu-miR-19b	608.00	608	mmu-miR-19b (ENPP1)
94	ENPP3	mmu-miR-24	311.00	311	mmu-miR-24 (ENPP3)
195	MTMR7	mmu-miR-92a	128.00	128	mmu-miR-92a (MTMR7)

Pathway ID	Adjusted P-value	Pathway Name			
658	0.01998	REACTOME_PROCESSING_OF_INTRONLESS_PRE_MRNAS			
ASSAY ID	Entrez Gene ID	miRNA Name	miRNApath Score	miRNApath Rank	miRNA - Gene
1	CLP1	mmu-let-7a	32.64	165	mmu-let-7a (CLP1)
3	CLP1	mmu-let-7b	28.36	140	mmu-let-7b (CLP1)
4	CLP1	mmu-let-7c	33.67	178	mmu-let-7c (CLP1)
6	CLP1	mmu-let-7d	6.84	24	mmu-let-7d (CLP1)
7	CLP1	mmu-let-7e	38.05	202	mmu-let-7e (CLP1)
10	CLP1	mmu-let-7i	14.13	40	mmu-let-7i (CLP1)
30	CLP1	mmu-miR-138*	144.00	144	mmu-miR-138* (CLP1)
12	CPSF1	mmu-miR-103	30.00	30	mmu-miR-103 (CPSF1)
96	CPSF2	mmu-miR-26a	46.95	241	mmu-miR-26a (CPSF2)
103	CPSF2	mmu-miR-297a	6.03	32	mmu-miR-297a (CPSF2)
40	CPSF7	mmu-miR-15b	43.96	209	mmu-miR-15b (CPSF7)
42	CPSF7	mmu-miR-16	41.93	203	mmu-miR-16 (CPSF7)
59	CPSF7	mmu-miR-1935	30.20	65	mmu-miR-1935 (CPSF7)
172	CPSF7	mmu-miR-674	10.01	51	mmu-miR-674 (CPSF7)
189	CPSF7	mmu-miR-762	22.65	135	mmu-miR-762 (CPSF7)
30	NCBP1	mmu-miR-138*	17.00	17	mmu-miR-138* (NCBP1)
44	NCBP1	mmu-miR-181a	7.02	11	mmu-miR-181a (NCBP1)
45	NCBP1	mmu-miR-181b	20.95	77	mmu-miR-181b (NCBP1)
174	NCBP1	mmu-miR-690	9.92	55.5	mmu-miR-690 (NCBP1)
13	PAPOLA	mmu-miR-106a	17.50	75	mmu-miR-106a (PAPOLA)
43	PAPOLA	mmu-miR-17	81.96	376	mmu-miR-17 (PAPOLA)
75	PAPOLA	mmu-miR-20a	39.39	164	mmu-miR-20a (PAPOLA)
103	PAPOLA	mmu-miR-297a	8.70	37	mmu-miR-297a (PAPOLA)
197	PAPOLA	mmu-miR-93	59.27	282	mmu-miR-93 (PAPOLA)
141	PCF11	mmu-miR-466h	5.65	13	mmu-miR-466h (PCF11)
143	PCF11	mmu-miR-466j	4.09	12	mmu-miR-466j (PCF11)

Pathway ID	Adjusted P-value	Pathway Name			
817	0.01998	REACTOME_MHC_CLASS_II_ANTIGEN_PRESENTATION			
ASSAY ID	Entrez Gene ID	miRNA Name	miRNApath Score	miRNApath Rank	miRNA - Gene
12	ACTR1B	mmu-miR-103	645.00	645	mmu-miR-103 (ACTR1B)
18	AP1G1	mmu-miR-1187	5.82	17	mmu-miR-1187 (AP1G1)
56	AP1G1	mmu-miR-191	2.81	20	mmu-miR-191 (AP1G1)
180	AP1G1	mmu-miR-705	4.49	4	mmu-miR-705 (AP1G1)
12	AP1M1	mmu-miR-103	564.00	564	mmu-miR-103 (AP1M1)
157	AP1M1	mmu-miR-574-5p	10.72	55	mmu-miR-574-5p (AP1M1)
189	AP1M1	mmu-miR-762	32.10	200	mmu-miR-762 (AP1M1)
94	AP1M2	mmu-miR-24	62.00	62	mmu-miR-24 (AP1M2)
171	AP1M2	mmu-miR-671-5p	12.09	51	mmu-miR-671-5p (AP1M2)
1	AP1S1	mmu-let-7a	18.75	70	mmu-let-7a (AP1S1)
3	AP1S1	mmu-let-7b	17.25	62	mmu-let-7b (AP1S1)
4	AP1S1	mmu-let-7c	18.42	66	mmu-let-7c (AP1S1)
6	AP1S1	mmu-let-7d	5.63	18	mmu-let-7d (AP1S1)
7	AP1S1	mmu-let-7e	16.74	58	mmu-let-7e (AP1S1)
10	AP1S1	mmu-let-7i	19.58	73	mmu-let-7i (AP1S1)
59	AP1S1	mmu-miR-1935	33.57	77	mmu-miR-1935 (AP1S1)
12	AP1S2	mmu-miR-103	702.00	702	mmu-miR-103 (AP1S2)
12	AP2A1	mmu-miR-103	639.00	639	mmu-miR-103 (AP2A1)
73	AP2M1	mmu-miR-19b	547.00	547	mmu-miR-19b (AP2M1)
180	AP2M1	mmu-miR-705	22.58	134	mmu-miR-705 (AP2M1)
182	AP2S1	mmu-miR-709	38.55	220	mmu-miR-709 (AP2S1)
172	CLTA	mmu-miR-674	6.45	25	mmu-miR-674 (CLTA)
157	CTSD	mmu-miR-574-5p	2.84	3	mmu-miR-574-5p (CTSD)
137	CTSH	mmu-miR-466f-3p	25.76	125	mmu-miR-466f-3p (CTSH)
195	CTSS	mmu-miR-92a	598.50	598.5	mmu-miR-92a (CTSS)
24	DCTN1	mmu-miR-125b-5p	32.16	171	mmu-miR-125b-5p (DCTN1)
12	DCTN2	mmu-miR-103	541.00	541	mmu-miR-103 (DCTN2)
41	DCTN2	mmu-miR-16*	457.00	457	mmu-miR-16* (DCTN2)
30	DCTN5	mmu-miR-138*	272.00	272	mmu-miR-138* (DCTN5)
195	DCTN5	mmu-miR-92a	652.00	652	mmu-miR-92a (DCTN5)
125	DNM1	mmu-miR-3473a	524.00	524	mmu-miR-3473a (DNM1)
182	DNM1	mmu-miR-709	41.28	232	mmu-miR-709 (DNM1)
94	DNM2	mmu-miR-24	674.00	674	mmu-miR-24 (DNM2)
197	DNM2	mmu-miR-93	70.06	332	mmu-miR-93 (DNM2)
12	DYNC1H1	mmu-miR-103	675.00	675	mmu-miR-103 (DYNC1H1)
40	DYNC1I1	mmu-miR-15b	60.56	317	mmu-miR-15b (DYNC1I1)
42	DYNC1I1	mmu-miR-16	49.03	256	mmu-miR-16 (DYNC1I1)
30	DYNC1I2	mmu-miR-138*	115.00	115	mmu-miR-138* (DYNC1I2)

148	DYNC1I2	mmu-miR-467f	41.02	178	mmu-miR-467f (DYNC1I2)
174	DYNC1I2	mmu-miR-690	10.42	60	mmu-miR-690 (DYNC1I2)
40	DYNC1LI2	mmu-miR-15b	59.04	307	mmu-miR-15b (DYNC1LI2)
42	DYNC1LI2	mmu-miR-16	51.71	278	mmu-miR-16 (DYNC1LI2)
44	DYNC1LI2	mmu-miR-181a	55.45	263	mmu-miR-181a (DYNC1LI2)
45	DYNC1LI2	mmu-miR-181b	74.61	348	mmu-miR-181b (DYNC1LI2)
49	DYNC1LI2	mmu-miR-1894-5p	6.75	21	mmu-miR-1894-5p (DYNC1LI2)
75	DYNC1LI2	mmu-miR-20a	71.26	353	mmu-miR-20a (DYNC1LI2)
197	DYNC1LI2	mmu-miR-93	87.87	401	mmu-miR-93 (DYNC1LI2)
73	DYNC2H1	mmu-miR-19b	383.00	383	mmu-miR-19b (DYNC2H1)
195	DYNC2H1	mmu-miR-92a	240.00	240	mmu-miR-92a (DYNC2H1)
44	DYNLL2	mmu-miR-181a	31.18	127	mmu-miR-181a (DYNLL2)
45	DYNLL2	mmu-miR-181b	28.29	115	mmu-miR-181b (DYNLL2)
125	DYNLL2	mmu-miR-3473a	54.00	54	mmu-miR-3473a (DYNLL2)
136	KIF15	mmu-miR-466c-5p	1.81	6	mmu-miR-466c-5p (KIF15)
41	KIF18A	mmu-miR-16*	313.00	313	mmu-miR-16* (KIF18A)
40	KIF23	mmu-miR-15b	34.66	154	mmu-miR-15b (KIF23)
42	KIF23	mmu-miR-16	33.26	142	mmu-miR-16 (KIF23)
43	KIF23	mmu-miR-17	41.38	182	mmu-miR-17 (KIF23)
75	KIF23	mmu-miR-20a	36.66	150	mmu-miR-20a (KIF23)
197	KIF23	mmu-miR-93	49.65	229	mmu-miR-93 (KIF23)
41	KIF2A	mmu-miR-16*	17.00	17	mmu-miR-16* (KIF2A)
6	KIF2B	mmu-let-7d	7.51	35	mmu-let-7d (KIF2B)
10	KIF2B	mmu-let-7i	14.99	45	mmu-let-7i (KIF2B)
44	KIF3B	mmu-miR-181a	36.88	157	mmu-miR-181a (KIF3B)
45	KIF3B	mmu-miR-181b	46.32	213	mmu-miR-181b (KIF3B)
59	KIF3B	mmu-miR-1935	7.42	6	mmu-miR-1935 (KIF3B)
182	KIF3B	mmu-miR-709	16.34	87	mmu-miR-709 (KIF3B)
189	KIF3C	mmu-miR-762	11.15	42	mmu-miR-762 (KIF3C)
43	KIF5A	mmu-miR-17	19.33	58	mmu-miR-17 (KIF5A)
75	KIF5A	mmu-miR-20a	19.30	60	mmu-miR-20a (KIF5A)
197	KIF5A	mmu-miR-93	18.65	54	mmu-miR-93 (KIF5A)
24	KLC2	mmu-miR-125b-5p	41.25	232	mmu-miR-125b-5p (KLC2)
180	KLC2	mmu-miR-705	13.93	96	mmu-miR-705 (KLC2)
189	KLC2	mmu-miR-762	9.93	32	mmu-miR-762 (KLC2)
41	KLC3	mmu-miR-16*	293.00	293	mmu-miR-16* (KLC3)
30	KLC4	mmu-miR-138*	51.00	51	mmu-miR-138* (KLC4)
182	KLC4	mmu-miR-709	21.31	132	mmu-miR-709 (KLC4)
195	RILP	mmu-miR-92a	3.00	3	mmu-miR-92a (RILP)
13	SAR1B	mmu-miR-106a	17.12	73	mmu-miR-106a (SAR1B)
43	SAR1B	mmu-miR-17	33.69	130	mmu-miR-17 (SAR1B)
75	SAR1B	mmu-miR-20a	37.65	154	mmu-miR-20a (SAR1B)

197	SAR1B	mmu-miR-93	46.21	214	mmu-miR-93 (SAR1B)
44	SEC24C	mmu-miR-181a	54.06	255	mmu-miR-181a (SEC24C)
45	SEC24C	mmu-miR-181b	27.76	109	mmu-miR-181b (SEC24C)
189	SEC24C	mmu-miR-762	31.44	198	mmu-miR-762 (SEC24C)
12	SH3GL2	mmu-miR-103	393.00	393	mmu-miR-103 (SH3GL2)
42	SH3GL2	mmu-miR-16	57.75	304	mmu-miR-16 (SH3GL2)
30	SPTBN2	mmu-miR-138*	34.00	34	mmu-miR-138* (SPTBN2)
40	SPTBN2	mmu-miR-15b	40.57	191	mmu-miR-15b (SPTBN2)
42	SPTBN2	mmu-miR-16	48.10	243	mmu-miR-16 (SPTBN2)

Pathway ID	Adjusted P-value	Pathway Name			
439	0.020979	ST_INTERLEUKIN_4_PATHWAY			
ASSAY ID	Entrez Gene ID	miRNA Name	miRNApath Score	miRNApath Rank	miRNA - Gene
12	AKT1	mmu-miR-103	213.00	213	mmu-miR-103 (AKT1)
195	AKT1	mmu-miR-92a	291.00	291	mmu-miR-92a (AKT1)
40	AKT3	mmu-miR-15b	5.09	4	mmu-miR-15b (AKT3)
42	AKT3	mmu-miR-16	5.29	6	mmu-miR-16 (AKT3)
43	AKT3	mmu-miR-17	51.94	245	mmu-miR-17 (AKT3)
44	AKT3	mmu-miR-181a	27.81	108	mmu-miR-181a (AKT3)
45	AKT3	mmu-miR-181b	35.97	155	mmu-miR-181b (AKT3)
75	AKT3	mmu-miR-20a	96.96	429	mmu-miR-20a (AKT3)
197	AKT3	mmu-miR-93	44.26	201	mmu-miR-93 (AKT3)
125	GRB2	mmu-miR-3473a	91.00	91	mmu-miR-3473a (GRB2)
137	GRB2	mmu-miR-466f-3p	16.95	73	mmu-miR-466f-3p (GRB2)
148	GRB2	mmu-miR-467f	9.05	21	mmu-miR-467f (GRB2)
12	IARS	mmu-miR-103	352.00	352	mmu-miR-103 (IARS)
40	IARS	mmu-miR-15b	72.73	378	mmu-miR-15b (IARS)
103	IARS	mmu-miR-297a	4.63	20	mmu-miR-297a (IARS)
182	IL2RG	mmu-miR-709	10.33	30	mmu-miR-709 (IL2RG)
94	IL4	mmu-miR-24	193.50	193.5	mmu-miR-24 (IL4)
13	JAK1	mmu-miR-106a	14.51	57	mmu-miR-106a (JAK1)
43	JAK1	mmu-miR-17	42.24	185	mmu-miR-17 (JAK1)
75	JAK1	mmu-miR-20a	34.05	133	mmu-miR-20a (JAK1)
125	JAK1	mmu-miR-3473a	645.00	645	mmu-miR-3473a (JAK1)
73	NROB2	mmu-miR-19b	464.50	464.5	mmu-miR-19b (NROB2)
46	PIK3CA	mmu-miR-1892	1.46	1	mmu-miR-1892 (PIK3CA)
162	PIK3CA	mmu-miR-669b	8.57	42	mmu-miR-669b (PIK3CA)
44	RPS6KB1	mmu-miR-181a	54.11	256	mmu-miR-181a (RPS6KB1)
45	RPS6KB1	mmu-miR-181b	34.65	148	mmu-miR-181b (RPS6KB1)
172	SHC1	mmu-miR-674	16.28	96	mmu-miR-674 (SHC1)
43	SOS1	mmu-miR-17	56.08	269	mmu-miR-17 (SOS1)

44	SOS1	mmu-miR-181a	58.55	279	mmu-miR-181a (SOS1)
45	SOS1	mmu-miR-181b	36.15	156	mmu-miR-181b (SOS1)
75	SOS1	mmu-miR-20a	32.95	128	mmu-miR-20a (SOS1)
197	SOS1	mmu-miR-93	27.84	101	mmu-miR-93 (SOS1)
30	SOS2	mmu-miR-138*	227.00	227	mmu-miR-138* (SOS2)
40	SOS2	mmu-miR-15b	70.01	360	mmu-miR-15b (SOS2)
42	SOS2	mmu-miR-16	87.35	436	mmu-miR-16 (SOS2)
1	TYK2	mmu-let-7a	8.27	12	mmu-let-7a (TYK2)
3	TYK2	mmu-let-7b	9.28	22	mmu-let-7b (TYK2)
4	TYK2	mmu-let-7c	8.28	13	mmu-let-7c (TYK2)
6	TYK2	mmu-let-7d	4.99	15	mmu-let-7d (TYK2)
7	TYK2	mmu-let-7e	7.03	15	mmu-let-7e (TYK2)
10	TYK2	mmu-let-7i	8.61	17	mmu-let-7i (TYK2)

Pathway ID	Adjusted P-value	Pathway Name			
963	0.021978	REACTOME_PROCESSING_OF_CAPPED_INTRONLESS_PRE_MRNA			
ASSAY ID	Entrez Gene ID	miRNA Name	miRNApath Score	miRNApath Rank	miRNA - Gene
1	CLP1	mmu-let-7a	32.64	165	mmu-let-7a (CLP1)
3	CLP1	mmu-let-7b	28.36	140	mmu-let-7b (CLP1)
4	CLP1	mmu-let-7c	33.67	178	mmu-let-7c (CLP1)
6	CLP1	mmu-let-7d	6.84	24	mmu-let-7d (CLP1)
7	CLP1	mmu-let-7e	38.05	202	mmu-let-7e (CLP1)
10	CLP1	mmu-let-7i	14.13	40	mmu-let-7i (CLP1)
30	CLP1	mmu-miR-138*	144.00	144	mmu-miR-138* (CLP1)
12	CPSF1	mmu-miR-103	30.00	30	mmu-miR-103 (CPSF1)
96	CPSF2	mmu-miR-26a	46.95	241	mmu-miR-26a (CPSF2)
103	CPSF2	mmu-miR-297a	6.03	32	mmu-miR-297a (CPSF2)
40	CPSF7	mmu-miR-15b	43.96	209	mmu-miR-15b (CPSF7)
42	CPSF7	mmu-miR-16	41.93	203	mmu-miR-16 (CPSF7)
59	CPSF7	mmu-miR-1935	30.20	65	mmu-miR-1935 (CPSF7)
172	CPSF7	mmu-miR-674	10.01	51	mmu-miR-674 (CPSF7)
189	CPSF7	mmu-miR-762	22.65	135	mmu-miR-762 (CPSF7)
94	LSM10	mmu-miR-24	141.00	141	mmu-miR-24 (LSM10)
195	LSM11	mmu-miR-92a	305.00	305	mmu-miR-92a (LSM11)
30	NCBP1	mmu-miR-138*	17.00	17	mmu-miR-138* (NCBP1)
44	NCBP1	mmu-miR-181a	7.02	11	mmu-miR-181a (NCBP1)
45	NCBP1	mmu-miR-181b	20.95	77	mmu-miR-181b (NCBP1)
174	NCBP1	mmu-miR-690	9.92	55.5	mmu-miR-690 (NCBP1)
13	PAPOLA	mmu-miR-106a	17.50	75	mmu-miR-106a (PAPOLA)
43	PAPOLA	mmu-miR-17	81.96	376	mmu-miR-17 (PAPOLA)
75	PAPOLA	mmu-miR-20a	39.39	164	mmu-miR-20a (PAPOLA)

103	PAPOLA	mmu-miR-297a	8.70	37	mmu-miR-297a (PAPOLA)
197	PAPOLA	mmu-miR-93	59.27	282	mmu-miR-93 (PAPOLA)
141	PCF11	mmu-miR-466h	5.65	13	mmu-miR-466h (PCF11)
143	PCF11	mmu-miR-466j	4.09	12	mmu-miR-466j (PCF11)

Pathway ID      Adjusted P-value      Pathway Name  
1025      0.021978      REACTOME\_PD1\_SIGNALING

ASSAY ID	Entrez Gene ID	miRNA Name	miRNApath Score	miRNApath Rank	miRNA - Gene
43	CD274	mmu-miR-17	85.26	387	mmu-miR-17 (CD274)
75	CD274	mmu-miR-20a	76.41	373	mmu-miR-20a (CD274)
197	CD274	mmu-miR-93	96.07	420	mmu-miR-93 (CD274)
189	CD3E	mmu-miR-762	33.21	209	mmu-miR-762 (CD3E)
44	CD4	mmu-miR-181a	78.24	346	mmu-miR-181a (CD4)
45	CD4	mmu-miR-181b	61.50	290	mmu-miR-181b (CD4)
94	CSK	mmu-miR-24	52.00	52	mmu-miR-24 (CSK)
141	LCK	mmu-miR-466h	14.47	71	mmu-miR-466h (LCK)