

Supplementary Table S1. The cellular identities and sources of data sets used in this study.

Sample no.^a	Abbreviation	Description	Cell/tissue-specific designation used in cluster profiles in Figures 2, 3 & 4	Chip IDs	Reference
1-3	PP M cells	Peyer's patch M cells	M cells/FAE	GSM190789, GSM190790, GSM190791	1
4-6	CT-stim. Villous epith.	Cholera toxin-stimulated (CTi) villous epithelium	Intestine-related	GSM190792, GSM190793, GSM190794	1
7-9	Ileum IEC	Ileum intestinal epithelial cells	Intestine-related	GSM190795, GSM190796, GSM190797	1
10,11	FAE	Follicle-associated epithelium from Peyer's patches	M cells/FAE	RMPYEP001001, RMPYEP002001	2,3
12,13	Small intestine epithelium	Small intestine epithelium	Intestine-related	RMINEP001001, RMINEP002001	2,3
14	Ileum IEC	Ileum intestinal epithelial cells-wild type	Intestine-related	GSM350371	4
15	Ileum IEC-GF	Ileum intestinal epithelial cells-germ free	Intestine-related	GSM350376	4
16	Colon IEC	Colonic intestinal epithelial cells-wild type	Intestine-related	GSM350375	4
17	Colon IEC-GF	Colonic intestinal epithelial cells-germ free	Intestine-related	GSM349880	4
18,19	Colon villi	Colonic villi tips	Intestine-related	GSM489362, GSM489363	5
20,21	Colon crypt	Colonic villi crypts	Intestine-related	GSM489374, GSM489375	5
22,23	Paneth cells	Paneth cells	Intestine-related	GSM318589, GSM318590	6
24,25	Paneth cells	Paneth-cells from conventionalized (d	Intestine-related	GSM116359.	7

		10) mice		GSM116360	
26,27	Paneth cells-GF	Paneth-cells from germ-free mice	Intestine-related	GSM116357, GSM116358	7
28,29	Bone marrow	Bone marrow	BM prog., granulocytes, DC, pDC	GSM258627, GSM628628	8
30,31	HSC	Haematopoietic stem cells	BM prog., granulocytes, DC, pDC	GSM258769, GSM258770	8
32,33	MEP	Mega erythroid progenitor cells	BM prog., granulocytes, DC, pDC	GSM258719, GSM258720	8
34,35	CMP	Common myeloid progenitor cells	BM prog., granulocytes, DC, pDC	GSM258641, GSM258642	8
36,37	GMP	Granulocyte/monocyte progenitor cells	BM prog., granulocytes, DC, pDC	GSM258665, GSM258666	8
38,39	Granulocytes	Purified CD11b ⁺ , Gr-1 ⁺ peripheral granulocytes	BM prog., granulocytes, DC, pDC	GSM258667, GSM258668	8
40-45	Mast cells	Culture-derived bone marrow mast cells (control & treated with IgE+Ag)	BM prog., granulocytes, DC, pDC	GSM258711, GSM258712, GSM258713, GSM258714, GSM258717, GSM258718	8
46,47	NK cells	NK1.1-positive natural killer cells	BM prog., granulocytes, DC, pDC	GSM258731, GSM258732	8
48,49	CD8a+ DC	CD8a ⁺ "lymphoid" classical dendritic cells	BM prog., granulocytes, DC, pDC	GSM258645, GSM258646	8
50,51	CD8a- DC	CD8a ⁻ "myeloid" classical dendritic cells	BM prog., granulocytes, DC, pDC	GSM258647, GSM258648	8
52,53	Plasmacytoid DC	Plasmacytoid dendritic cells (B220 ⁺)	BM prog., granulocytes, DC, pDC	GSM258649, GSM258650	8
54,55	BMM	Bone marrow-derived macrophages	Phagocytes	GSM258693, GSM258694	8

56,57	BMM LPS-6h	Bone marrow-derived macrophages 6 h after LPS stimulation	Phagocytes	GSM258699, GSM258700	8
58,59	PMM	Thioglycollate-elicited peritoneal macrophages	Phagocytes	GSM258701, GSM258702	8
60,61	PMM LPS-7h	Thioglycollate-elicited peritoneal macrophages 7 h after LPS stimulation	Phagocytes	GSM258705, GSM258706	8
62,63	Microglia	Microglial cells	Phagocytes	GSM258721, GSM258722	8
64,65	Osteoclasts	Osteoclasts, CSF-1 & RANKL-treated bone marrow cultures	Phagocytes	GSM258743, GSM258744	8
66	Thymocyte DN	CD4 ⁻ CD8 ⁺ double-negative thymocytes	T cells, B cells	GSM465595	9
67,68	T cells CD4 ⁺	CD4 ⁺ T helper cells	T cells, B cells	GSM258773, GSM258774	8
69,70	T cells CD8 ⁺	CD8 ⁺ cytotoxic T cells	T cells, B cells	GSM258775, GSM258776	8
71,72	Tregs	Regulatory T cells	T cells, B cells	GSM258777, GSM258778	8
73,74	BAF3	Interleukin 3-dependent pro-B cell line	T cells, B cells	GSM258619, GSM258620	8
75,76	MZ B cell	Splenic marginal zone B cells	T cells, B cells	GSM258621, GSM258622	8
77,78	Follicular B cells	Splenic follicular B cells	T cells, B cells	GSM258663, GSM258664	8
79,80	FL-Y	Lymphotoxin β receptor signalling-dependent follicular dendritic cell line	FDC, Endo., LTi, NH cells	RMLNDC002001, RMLNDC003001	3,10
81-83	PP FDC	Follicular dendritic cells enriched from Peyer's patches	FDC, Endo., LTi, NH cells	GSM481976, GSM481977, GSM481978	11
84	Lymphendo cells	Lymphatic endothelial cells	FDC, Endo., LTi, NH cells	GSM143704	12

85	MS-1	Endothelial cells	FDC, Endo., LTi, NH cells	GSM234692	13
86	LTi cell	Lymphoid tissue-inducer cells from fetal liver	FDC, Endo., LTi, NH cells	GSM465596	9
87-88	NH cell	Natural helper cells, Lin ^c -Kit ⁺ Sca-1 ⁺ cells. Th2-type innate lymphocytes prepared from fat-associated lymphoid clusters	FDC, Endo., LTi, NH cells	GSM465593, GSM465594	9
89,90	Chondrocytes	Primary chondrocytes	Mesenchyme	GSM226740, GSM266741,	14
91,92	OB 5 days	Primary neonatal calvarial osteoblast 5 days after stimulation with glycerophosphate and ascorbate	Mesenchyme	GSM258741, GSM258742	8
93,94	OB 14 days	Osteoblast 14 days after stimulation	Mesenchyme	GSM258736, GSM258737	8
95,96	OB 21 days	Osteoblast 21 days after stimulation	Mesenchyme	GSM258739, GSM258740	8
97,98	10T1/2	Embryonic mesenchymal multipotent osteoblast progenitor	Mesenchyme	GSM258631, GSM258632	8
99,100	3T3-L1	Embryonic fibroblasts - adipocyte like	Mesenchyme	GSM258609, GSM258610	8
101,102	NIH3T3	Embryonic fibroblasts	Mesenchyme	GSM258729, GSM258730	8
103,104	C2C12	Myoblast	Mesenchyme	GSM258629, GSM258630	8
105,106	Bruce4	Embryonic stem cell	Mesenchyme	GSM258655, GSM258656	8
107,108	MIMCD3	Renal inner medullary epithelial cell	Mesenchyme	GSM258723, GSM258724	8

109,110	min6	Pancreatic beta cell, insulin secreting	Mesenchyme	GSM258725, GSM258726	8
111	Astrocytes	Astrocytes. FACS-sorted from transgenic mice that express enhanced green fluorescent protein under the control of an S100beta promoter	Mesenchyme	GSM241898	15
112,113	Neuro2a	Neuroblastoma cells	Mesenchyme	GSM258727, GSM258728	8
114,115	Spleen	Splenocytes	Spleen, lymph nodes	GSM258767, GSM258768	8
116,117	Lymph nodes	Lymph node cells	Spleen, lymph nodes	GSM258691, GSM258692	8
118,119	Intestine small	Small intestine	Intestine-related	GSM258677, GSM258678	8
120,121	Intestine large	Large intestine	Intestine-related	GSM258675, GSM258676	8
122,123	Colon-d4	Distal colon, control d4	Intestine-related	GSM198101, GSM198102	GSE8025
124-126	Colon-d9	Distal colon, control d9	Intestine-related	GSM198103, GSM198104, GSM198105	GSE8025
127-130	NALT	Nasal-associated lymphoid tissue	NALT	GSM289408, GSM289409, GSM289410, GSM289411	16
	RANKL-stimulated villous epithelium ^a	Villous epithelium at 0, 1, 2, 3 & 4 d after RANKL-treatment		RSM01709, RSM01710, RSM01711, RSM01712, RSM01713, RSM01714, RSM01715, RSM01716, RSM01717, RSM01718, RSM01719, RSM01720, RSM01724, RSM01725,	17

				RSM01726	
	<i>In vitro</i> cultivated RANKL-stimulated small intestinal organoids ^c	Small intestinal organoids treated with/out RANKL		GSM949492, GSM949493	GSE38785

All samples were analysed on Affymetrix mouse genome MOE430 2.0 expression arrays unless indicated otherwise.

^a, Samples listed in order of presentation from left to right on the cluster profiles.

^b, Performed on Affymetrix mouse gene 1.0 ST expression arrays.

^c, Performed on Agilent 4x44K whole mouse genome expression arrays.

References

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