

Figure 2C

HSC	PBC	NBC	GCB	MBC	Gene name	HSC	PBC	NBC	GCB	MBC	UniGene	Proposed function	Reference
					<i>Ikaros</i>	4	62	4	3	12	54452	reduces BCR-dependent activation	Kirstetter et al., 2001
					<i>LYN</i>	3	99	31	20	24	80887	attenuates BCR signaling	Chan et al., 1998
					<i>IκBα</i>	9	90	42	27	24	81328	inhibits NF-κB activation upon BCR ligation	Petro et al., 2000
					<i>SHP-1</i>	21	3	28	10	7	63489	antagonises CD45	Pani et al., 1997
					<i>IBTK</i>			15		3	7387	inhibition of BTK	Liu et al., 2001
					<i>SIRPα1</i>	4	9	16		3	156114	SHP-1 substrate	Cambier, 1997
					<i>c-SRC/ CSK</i>	9	6	54	7	9	77793	inhibits BCR signaling in association with p62DOK	Vuica et al., 1997
					<i>CD66/ CEA-related CAM-1</i>	7	13	38	3	7	50964	ITIM, binds to SHIP, SHP-1	Chen et al., 2001
					<i>LIR-B5</i>			19		3	77062	ITIM	Borges et al., 1997
					<i>PTEN</i>	9	2	20	7	3	10712	inhibits activation of BTK	Satterthwaite et al., 2000
					<i>SIAH-1</i>	105	11	154	27	24	279009	downregulates OBF-1	Tiedt et al., 2001
					<i>CD83</i>	2	30	43	7	7	79197	member of SigLec family, effect on BCR signals unclear	Scholler et al., 2001
					<i>CD24</i>	41	12	76	17	7	286124	LYN-activation via lipid rafts	Suzuki et al., 2001
					<i>CD22</i>		3	46	17	7	171763	ITIM	Nitschke et al., 1997
					<i>PD-1</i>			23		3	158297	inhibits Ca <sup>2+</sup> flux, Syk- and PLCγ-activation	Okazaki et al., 2001
					<i>SigLec-6</i>	1		8			117992	ITIM	Patel et al., 1999
					<i>Ly49</i>	2	1	8			159297	represses BCR signals through Lyn kinase activation	Ochi and Watanabe, 2000
					<i>NF-AT4</i>	2		8			77810	lowered BCR signaling threshold in NF-AT4 deficient mice	Ranger et al., 1998
					<i>PKCμ</i>	5	1	8			2891	inhibits SYK-mediated phosphorylation of PLCγ	Sidorenko et al., 1996
					<i>CD31</i>	6	2	27		3	78146	ITIM; recruits SHP-1	Henshall et al., 2001
					<i>PKC-β</i>	13	4	27	3	3	77202	inhibits BTK membrane localisation, Ca <sup>2+</sup> flux upon BCR ligation	Kang et al., 2001
					<i>SHIP</i>	11	2	75	7	7	155939	inhibition of BCR signaling in association with SHIP	Ono et al., 1997
					<i>PTP-PEST</i>	5		16			62	inhibits BCR-signals; dephosphorylation of <i>FAK</i> , <i>PYK-2</i> , <i>SHC</i>	Davidson and Veillette, 2001
					<i>CD32/ FcγRII</i>	3	1	38	10	3	278443	ITIM, recruits SHP-1	Gupta et al., 1997
					<i>SigLec-8</i>	6	5	42	10	3	279751	ITIM	Ravetch and Lanier, 2000
					<i>SLAP</i>	1	2	15	3		75367	represses BCR-mediated signals	Holland et al., 2001
					<i>B7-H1</i>		1	8			97269	Inhibition of antigen receptor signaling by PD-1 ligation	Freeman et al., 2000
					<i>TACI</i>	1		8			158341	negative regulation of BCR-mediated activation	Yan et al., 2001
					<i>Aiolos</i>	1	1	8			258579	Inhibition of BTK	Cariappa et al., 2001
					<i>G6B</i>			8			247879	ITIM	de Vet et al., 2001
					<i>CD35</i>	1	1	8			193716	CD35 ligation inhibits anti-IgM-induced Ca <sup>2+</sup> influx	Jozsi et al., 2002
					<i>PKA, RIα</i>	9	2	51	10	3	183037	suppresses BCR-dependent proliferative response	Levy et al., 1996
					<i>CD72</i>	2	22	101	7	7	116481	ITIM	Adachi et al., 2000
					<i>SAB</i>	4	5	20	7		109150	inhibits BTK	Yamadori et al., 1999
					<i>LAIR-1</i>	4		11			115808	suppression of Ca <sup>2+</sup> influx in response to BCR crosslinking	Vuurst de Vries et al., 1999
					<i>SPAP-1</i>	1	1	11			194976	ITIMs	Davis et al., 2001
					<i>CD43</i>	7	40	23			80738	transgenic expression inhibits response upon BCR engagement	Ostberg et al., 1997
					<i>CD30L</i>			23	3		1313	Engagement by CD30 inhibits CSR and NF-κB activation	Cerutti et al., 2000
					<i>CD5</i>	2	1	12			52002	ITIM	Gary-Gouy et al., 2002
					<i>CD33</i>	4	1	12			83731	ITIM, recruitment of SHP-1	Paul et al., 2000
					<i>CBL</i>	6	1	12			99980	suppresses BCR-dependent PLCγ2-activation	Yasuda et al., 2000
					<i>CMRF-35H</i>	1	2	12			2605	ITIM	Clark et al., 2000
					<i>p62DOK</i>	7	2	12			103854	mediates CD32-dependent inhibition of BCR signals	Tamir et al., 2000
					<i>LLIR</i>	1		15			115515	ITIM	Huang et al., 2001
					<i>SLAP-2</i>	1	1	15			334489	inhibition of BCR signals synergistically with CBL	Holland et al., 2001
					<i>LIR-B2</i>	9	2	15			22405	ITIM	Borges et al., 1997
					<i>platelet gp VI</i>	22	6	19	3		272216	inhibitory signaling through CD32	Quek et al., 2000
					<i>APS</i>	15	4	19	3		105052	recruits CBL, inhibits JAK signaling in response to BCR ligation	Wakioka et al., 1999
					<i>PIR-β</i>	11	2	23	3		122591	ITIM	Kubagawa et al., 1999
					<i>SigLec-5</i>	7	2	42			117005	ITIM	Ravetch and Lanier, 2000
					<i>LIR-B1</i>	17	9	45			204040	ITIM	Borges et al., 1997