

Table 3

ID	Gene	Description	Location	Type
BCG				
DETRUSOR	NM_019816	apoptosis antagonizing transcription factor	Nucleus	transcription regulator
	NM_007422	adenylosuccinate synthase	Cytoplasm	enzyme
	NM_017402	Rho guanine nucleotide exchange factor (GEF) 7	Cytoplasm	other
	NM_007890	AT rich interactive domain 3A (BRIGHT-like)	Nucleus	transcription regulator
	NM_019685	ADP-ribosylation factor-like 6	Cytoplasm	transporter
	NM_007490	ADP-ribosyltransferase 2a	Extracellular Space	enzyme
	NM_011797	carbonic anhydrase XIV	Plasma Membrane	enzyme
	L22844	CD22 molecule	Plasma Membrane	other
	NM_010016	CD55 molecule, decay accelerating factor for complement	Plasma Membrane	other
	L25606	CD86 molecule	Plasma Membrane	transmembrane receptor
	AB008811	cadherin 2, type 1, N-cadherin (neuronal)	Plasma Membrane	other
	NM_017478	costomer protein complex, subunit gamma 2	Cytoplasm	transporter
	NM_011991	COP9 constitutive photomorphogenic homolog subunit 3	Cytoplasm	other
	U05247	c-src tyrosine kinase	Cytoplasm	kinase
	U90331	catenin (cadherin-associated protein), delta 2	Plasma Membrane	other
	NM_010046	diacylglycerol O-acyltransferase homolog 1	Cytoplasm	enzyme
	NM_016811	diacylglycerol kinase, alpha 80kDa	Cytoplasm	kinase
	NM_007939	DEAH (Asp-Glu-Ala-His) box polypeptide 15	Nucleus	enzyme
	NM_015775	DnaI (Hsp40) homolog, subfamily C, member 5	Plasma Membrane	other
	NM_019680	E74-like factor 4 (ets domain transcription factor)	Nucleus	transcription regulator
	Z32815	ELK3, ETS-domain protein (SRF accessory protein 2)	Nucleus	transcription regulator
	U72523	enabled homolog (Drosophila)	Cytoplasm	other
	U39643	Fas (TNFRSF5) associated factor 1	Nucleus	other
	NM_008033	farnesyltransferase, CAAX box, alpha	Cytoplasm	enzyme
	NM_010259	GBP2 (includoguanlylate binding protein 2, interferon-inducible)	Cytoplasm	enzyme
	NM_008137	guanine nucleotide binding protein (G protein), alpha 14	Plasma Membrane	enzyme
	NM_013331	guanine nucleotide binding protein (G protein), beta polypeptide 4	Plasma Membrane	enzyme
	NM_010316	guanine nucleotide binding protein (G protein), gamma 3	Plasma Membrane	enzyme
	NM_010382	HLA-DRB1	Plasma Membrane	transmembrane receptor
	NM_010467	homeobox D1	Cytoplasm	transcription regulator
	NM_010473	histidine rich calcium binding protein	Cytoplasm	other
	U39391	5-hydroxytryptamine (serotonin) receptor 1A	Plasma Membrane	G-protein coupled receptor
	NM_011772	IKAROS family zinc finger 4 (Eos)	Nucleus	transcription regulator
	M84748	interleukin 9 receptor	Plasma Membrane	transmembrane receptor
	NM_001208	integrin, alpha M (complement component 3 receptor 3 subunit)	Plasma Membrane	other
	NM_010596	potassium voltage-gated channel, shaker-related subfamily, member 7	Plasma Membrane	ion channel
	U65591	potassium voltage-gated channel, shaker-related subfamily, beta member 1	Plasma Membrane	ion channel
	M42229	potassium voltage-gated channel, Shab-related subfamily, member 1	Plasma Membrane	ion channel
	NM_008467	karyopherin alpha 4 (importin alpha 3)	Nucleus	transporter
	NM_007947	lipocalin 5	Cytoplasm	enzyme
	M17015	lymphotxin alpha (TNF superfamily, member 1)	Extracellular Space	cytokine
	D13759	mitogen-activated protein kinase kinase kinase 8	Cytoplasm	kinase
	NM_008590	mesoderm specific transcript homolog (mouse)	Extracellular Space	peptidase
	NM_011845	midline 2	Cytoplasm	other
	U43548	MAK-like protein X	Nucleus	transcription regulator
	NM_008609	matrix metalloproteinase 15 (membrane-inserted)	Extracellular Space	peptidase
	X81143	mutS homolog 2, colon cancer, nonpolyposis type 1 (E. coli)	Nucleus	enzyme
	NM_008657	myogenic factor 6 (herculin)	Nucleus	transcription regulator
	X59060	myogenic factor 6 (herculin)	Nucleus	transcription regulator
	L00923	myosin IB	Cytoplasm	other
	NM_019825	nuclear receptor coactivator 6	Nucleus	transcription regulator
	NM_011060	peptidyl arginine deiminase, type III	Cytoplasm	enzyme
	NM_011294	phosphatidylinositol glycan anchor biosynthesis, class N	Cytoplasm	enzyme
	NM_008845	phosphatidylinositol-4-phosphate 5-kinase, type II, alpha	Cytoplasm	kinase
	X62701	PLAUR	Plasma Membrane	transmembrane receptor
	NM_011104	protein kinase C, epsilon	Cytoplasm	kinase
	NM_008858	protein kinase D1	Cytoplasm	kinase
	NM_011172	proline dehydrogenase (oxidase) 1	Cytoplasm	enzyme
	NM_011969	proteasome (prosome, macropain) subunit, alpha type, 7	Cytoplasm	peptidase
	NM_011214	protein tyrosine phosphatase, receptor type, U	Plasma Membrane	phosphatase
	NM_009017	retinoic acid early transcript beta	Plasma Membrane	other
	NM_009067	retA binding protein 1	Cytoplasm	enzyme
	NM_009327	RASGEF2	Cytoplasm	other
	NM_019870	REV1 homolog (S. cerevisiae)	Nucleus	enzyme
	NM_017395	retinoyl factor X, 5 (influenza HLA class II expression)	Nucleus	transcription regulator
	NM_013876	ring finger protein 11	Nucleus	other
	NM_019996	RNA U1, small nuclear RNA export adaptor	Unknown	other
	NM_009071	Rho-associated, coiled-coil containing protein kinase 1	Cytoplasm	kinase
	NM_009113	S100 calcium binding protein A13	Cytoplasm	other
	NM_016717	selenocysteine lyase	Cytoplasm	enzyme
	L26179	SCN1A	Plasma Membrane	ion channel
	NM_011345	selectin E (endothelial adhesion molecule 1)	Plasma Membrane	other
	X97817	semaphorin 5A	Plasma Membrane	transmembrane receptor
	NM_013781	SH2 domain containing 3C	Cytoplasm	other
	NM_009197	solute carrier family 15, member 2	Plasma Membrane	transporter
	NM_011391	SLC16A7	Plasma Membrane	transporter
	NM_011396	SLC22A5	Plasma Membrane	transporter
	NM_009211	SMARCC1	Nucleus	transcription regulator
	D49473	SRY (sex determining region Y)-box 17	Nucleus	transcription regulator
	NM_011564	sex determining region Y	Nucleus	transcription regulator
	NM_019637	serine/threonine/tyrosine interacting protein	Cytoplasm	phosphatase
	NM_020254	serinal vesicle secretory protein 7	Extracellular Space	other
	NM_009532	tumor-associated calcium signal transducer 1	Plasma Membrane	other
	NM_011549	transcription factor EB	Nucleus	transcription regulator
	NM_011599	transducin-like enhancer of split 1	Nucleus	transcription regulator
	NM_011626	transmembrane protein 165	Plasma Membrane	other
	NM_009462	ubiquitin specific peptidase 10	Cytoplasm	peptidase
	NM_009500	vav 2 oncogene	Extracellular Space	cytokine
	M84467	vascular cell adhesion molecule 1	Plasma Membrane	other
	NM_016873	WNT1 inducible signaling pathway protein 2	Extracellular Space	other
	NM_012017	zinc finger protein 346	Nucleus	other
	M88502	zinc finger protein 436	Nucleus	other
BCG				
MUCOSA				
	NM_019774	A kinase (PRKA) anchor protein 8	Nucleus	other
	AF064071	apoptotic peptidase activating factor 1	Cytoplasm	other
	Y16256	basigin (Ok blood group)	Plasma Membrane	other
	NM_020336	calmodulin-like 5	Cytoplasm	other
	NM_016739	cell cycle associated protein 1	Plasma Membrane	other
	NM_009808	caspase 12	Cytoplasm	peptidase
	NM_007986	dystrobrevin, beta	Plasma Membrane	other
	NM_010064	dysyin, cytoplasmic 1, intermediate chain 2	Cytoplasm	other
	U52951	enhancer of zeste homolog 2 (Drosophila)	Nucleus	transcription regulator
	NM_013857	Fc fragment of IgE, low affinity II, receptor for (CD23)	Plasma Membrane	other
	NM_019873	FKBP1	Unknown	other
	L36434	GNPTAB	Unknown	enzyme
	NM_019691	glutamate receptor, ionotropic, AMPA 4	Plasma Membrane	ion channel
	M13226	granzyme A (granzyme 1, cytotoxic T-lymphocyte-associated serine esterase 3)	Cytoplasm	peptidase
	NM_013546	HEBP1	Cytoplasm	other
	Z50013	HRAS	Plasma Membrane	enzyme
	NM_008313	HTR4	Plasma Membrane	G-protein coupled receptor
	X15181	IGFBP3	Extracellular Space	other
	NM_008324	INDO	Cytoplasm	enzyme
	AB005141	KL	Extracellular Space	enzyme
	U69270	LDB1	Nucleus	transcription regulator
	NM_013590	LIZ	Extracellular Space	enzyme
	NM_008641	microtubule associated serine/threonine kinase 2	Cytoplasm	kinase
	NM_013839	NR1H3	Nucleus	ligand-dependent nuclear receptor
	NM_017340	NR1P1	Nucleus	transcription regulator
	NM_008794	PCSK7	Cytoplasm	peptidase
	NM_019540	PFPL	Unknown	other
	NM_019762	PKP3	Plasma Membrane	other
	NM_011121	PKL1	Nucleus	kinase
	L12667	PNMT	Cytoplasm	enzyme
	NM_008911	PPOX	Cytoplasm	enzyme
	U03873	PRRX1	Nucleus	transcription regulator
	NM_011180	PSCD1	Cytoplasm	other
	NM_011730	pleckstrin homolog, Sec7 and coiled-coil domains 1 (cytosolin 1)	Plasma Membrane	transporter
	NM_008542	SMAD6	Nucleus	transcription regulator
	NM_011467	SPR	Cytoplasm	enzyme
	NM_019876	THSD1	Unknown	other
	NM_016792	thioredoxin-like 1	Cytoplasm	enzyme
	NM_009493	V2R4	Plasma Membrane	other
	NM_011776	ZP3	Extracellular Space	other
BCG				
DETRUSOR	L23971	FMR1	Nucleus	other
AND	L34290	GNBS	Plasma Membrane	enzyme
MUCOSA	J03958	GSTA5	Cytoplasm	enzyme
	NM_019508	IL17B	Extracellular Space	cytokine
	M17015	LTA	Extracellular Space	cytokine
	NM_010745	LY96	Plasma Membrane	other
	NM_008976	PTPN14	Cytoplasm	phosphatase
	NM_011443	SOX2	Nucleus	transcription regulator
	NM_009301	SV55	Extracellular Space	other