

Table 2. Genes regulated by MT-MC1 in 32D cells

GenBank Source	Gene Symbol	Functional Category/Gene	Fold Change	c-Myc Target	Role in Cancer
Signal Transduction					
X04648	Fcgr2b	Fc receptor, IgG, low affinity II b	↑ 16.3		+
U15209	Ccl9	Chemokine (C-C motif) ligand 9	↑ 12.9		
U91967	Gp1ba	Glycoprotein 1b, alpha polypeptide	↑ 12.4		+
AH001995	Anxa1	Annexin A1 (lipocortin 1)	↑ 11.1		+
X13335	Adam8	A disintegrin and metalloprotease domain 8	↑ 8.1	+	
M58004	Ccl6	Chemokine (C-C motif) ligand 6	↑ 6.7	+	+
X93328	Ly71	Lymphocyte antigen 71 (Emr1)	↑ 6.3		
BC056450	Tyrobp	TYRO protein tyrosine kinase binding protein	↑ 5.3		+
Z48589	Tcrg-V2	T-cell receptor gamma, variable 2	↑ 5.1		+
AK089836	Tgtp	T-cell specific GTPase	↑ 5.0		
L41365	Daf2	Decay accelerating factor 2	↑ 4.0		+
L41366	Daf1	Decay accelerating factor 1	↑ 4.0		
M90316	Lsp1	Lymphocyte-specific protein1	↑ 4.0	+	+
U03279	Pik3ca	Phosphatidylinositol 3-kinase, catalytic, alpha polypeptide	↑ 2.7		+
BC006948	Lcp2	Lymphocyte cytosolic protein 2	↑ 2.1		+
D87747	Cxcr4	Chemokine (C-X-C motif) receptor 4	↓ 2.2		+
L05670	Clu	Clusterin (apolipoprotein J)	↓ 3.3		+
L06443	Gdf3	Growth differentiation factor 3	↓ 7.9		+
Chaperones, Trafficking, Transport					
AK050042	Aqp9	Aquaporin 9	↑ 5.9		
AK088102	Aim1	Absent in melanoma 1	↑ 2.7	+	+
X16133	Prg	Proteoglycan, secretory granule	↑ 2.3		+
AJ002306	Syngri1	Synaptotagrin 1	↓ 2.9	+	
AF049125	Rcn2	Reticulocalbin 2	↓ 3.5		
Nuclear Factors					
BC021453	Ddx3y	DEAD (Asp-Glu-Ala-Asp) box polypeptide 3, Y-linked	↑ 12.1		
BC057880	Lmo2	LIM domain only 2	↑ 4.4		+
AF269248	Hemgn	Hemogen	↑ 4.3		+
U86405	Bin1	Bridging integrator 1	↑ 3.5		+
AK077543	Spag7	Sperm associated antigen 7	↑ 2.3		
AB014494	Arntl	Aryl hydrocarbon receptor nuclear translocator-like	↓ 2.3		
M20824	Mdm1	Transformed mouse 3T3 cell double minute 1	↓ 3.5		
Biosynthesis					
AJ006584	Eif2s3y	Eukaryotic translation initiation factor 2, subunit 3, Y-linked	↑ 13.1		
AK032283	Piga	Phosphatidylinositol glycan, class A	↑ 3.5		
AK077566	Hccs	Holocytochrome c synthetase	↑ 2.9		
BC022110	Alas1	Aminolevulinic acid synthetase 1	↑ 2.5		
AH005589	Gamt	Guanidinoacetate methyltransferase	↓ 3.1	+	
AB049643	Mrpl16	Mitochondrial ribosomal protein L16	↓ 4.3		
Antioxidative Enzymes					
AF290914	Stab1	Stabilin 1	↑ 4.1		
AK035425	Ltb4dh	Leukotriene B4 12-hydroxydehydrogenase	↓ 5.6		
M74570	Aldh1a1	Aldehyde dehydrogenase family 1, subfamily A1	↓ 9.2	+	+
L06047	Gsta4	Glutathione S-transferase, alpha 4	↓ 9.6		
Uncertain Function					
BC053433	Utx	Ubiquitously transcribed tetratricopeptide repeat gene, X chr.	↑ 11.6		
Y09222	Uty	Ubiquitously transcribed tetratricopeptide repeat gene, Y chr.	↑ 5.4		+
BC018296	Erdr1	Erythroid differentiation regulator 1	↑ 3.1		+
AJ001616	Myadm	Myeloid-associated differentiation marker	↑ 2.6		
Unknown					
BC024822		Hypothetical protein (weakly similar to human GASP)	↑ 3.2		
BC056255		Hypothetical protein	↓ 2.6		
C85523		Mouse fertilized one-cell embryo cDNA	↓ 4.6		

All genes listed here were identified by microarray gene expression comparisons between 32D-MT-MC1 and 32D-neo cells. Genes are listed according to their relative levels of expression in the former cell line. Values represent the average differential expression in three separate microarray comparison experiments. Only those genes whose differential expression varied by ≥2-fold in each of three experiments are listed. +, previously identified c-Myc target genes or those implicated in cancer.