

microRNA:	Target microRNAs:	Gene Name:	Predicted Target: Pictar	Predicted Target: Target-scan	Predicted Target: miRBase	Function:
miR-125a	<i>MLF2</i>	Myeloid leukemia factor-2	Yes	Yes	Yes	Hemopoietic differentiation and erythroid/ myeloid lineage switching
miR-125a	<i>LIFR</i>	Leukemia inhibitory factor-receptor	Yes	Yes	-	Macrophage differentiation
miR-125a	<i>IL-16</i>	Interleukin-16	Yes	Yes	Yes	Pro-inflammatory cytokine
miR-125a	<i>STAT3</i>	Signal transducer and activator of transcription 3	Yes	Yes	-	Transcription factor that binds to the interleukin-6 (IL-6)-responsive elements
miR-125a	<i>STAT2</i>	Signal transducer and activator of transcription 2	-	-	Yes	Transcription factor that activates the transcription of interferon stimulated genes
miR-125a	<i>IRF-4</i>	Interferon regulatory factor 4	Yes	Yes	-	Transcriptional activator that binds to the ISRE of the MHC class I promoter
miR-125a	<i>MCL-1</i>	Myeloid cell leukemia sequence 1	Yes	Yes	-	Anti-apoptotic member of Bcl2 family
miR-125a	<i>GAB2</i>	GRB2-associated binding protein 2	Yes	Yes	-	Adaptor protein for signaling pathways (B- and T-cell Ag receptors)
miR-125a	<i>LAT</i>	Linker for activation of T-cells	-	-	Yes	Links TCR to the biochemical events of T-cell activation
miR-125a	<i>LYL1</i>	Lymphoblastic leukemia-derived sequence 1	-	-	Yes	Transcription factor involved in T-cell acute lymphoblastic leukemia
miR-132	<i>PTBP2</i>	polypyrimidine tract binding protein 2	Yes	Yes	-	RNA-binding protein which binds to polypyrimidine tracts.
miR-132	<i>LCK</i>	Lymphocyte cell-specific protein-tyrosine kinase	-	-	Yes	Lymphoid specific protein tyrosine kinase
miR-132	<i>CD72</i>	B-cell differentiation antigen CD72 (Lyb-2)	-	-	Yes	Expressed on all cells of B cell lineage (with exception of plasma cells) and weakly on macrophages
miR-132	<i>STAT4</i>	Signal transducer and activator of transcription 4	-	-	Yes	Mediates responses to IL-12 in lymphocytes, and regulates the differentiation of T helper cells

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miR-142.3p	<i>PTPN23</i>	Tyrosine-protein phosphatase non-receptor type 23	Yes	Yes	Yes	Protein tyrosine phosphatase
miR-142.3p	<i>IRAK1</i>	Interleukin-1 receptor-associated kinase 1	Yes	Yes	-	Serine/ threonine kinase that associates with the interleukin-1 receptor
miR-142.3p	<i>MLLT7</i>	Myeloid/lymphoid or mixed-lineage leukemia, transl. to 7	Yes	Yes	-	Fork-head transcription factor , chromosomal aberrations involved in acute leukemias
miR-142.3p	<i>IL-10</i>	Interleukin-10	-	-	Yes	Cytokine that stimulates other immune cells to divide and differentiate
miR-142.3p	<i>IL-21</i>	Interleukin-21	-	-	Yes	Growth factor for naive B cells.
miR-142.3p	<i>MMD</i>	Monocyte to macrophage differentiation-associated	-	Yes	Yes	Expressed in in vitro differentiated macrophages
miR-142.3p	<i>TCF8</i>	Transcription factor 8 (represses interleukin 2 expression)	Yes	-	-	Inhibits interleukin 2 gene expression
miR-142.3p	<i>CRTAM</i>	Class-I MHC-restricted T cell associated molecule	Yes	Yes	-	Highly expressed surface markers for activated CD8 T-cells and NK cells
miR-142.3p	<i>LAT</i>	Linker for activation of T-cells family member 1	-	-	Yes	Links TCR to the biochemical events of T-cell activation
miR-142.3p	<i>CD27</i>	T-cell activation antigen CD27	-	-	Yes	Tumor necrosis factor receptor superfamily, predominantly on lymphocytes
miR-150	<i>v-myb</i>	v-myb myeloblastosis viral oncogene homolog	Yes	Yes	-	Controls proliferation and differentiation of hematopoietic progenitor cells
miR-150	<i>IRAK2</i>	Interleukin-1 receptor-associated kinase 2	-	Yes	Yes	Serine/ threonine kinase that associates with the interleukin-1 receptor
miR-150	<i>MLLT7</i>	Myeloid/lymphoid or mixed-lineage leukemia, transl. to 7	Yes	Yes	-	Fork-head transcription factor , chromosomal aberrations involved in acute leukemias
miR-150	<i>NFATC4</i>	Nuclear factor of activated T-cells, cytoplasmic 4	-	-	Yes	Member of the nuclear factors of activated T cells DNA-binding

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						transcription complex
miR-150	<i>SOCS-1</i>	Suppressor of cytokine signaling 1	-	-	Yes	Negative regulator of JAK-STAT signal pathway
miR-150	<i>SRF</i>	Serum response factor	Yes	Yes		Transcription factor that binds the serum response element
miR-150	<i>PU.1</i>	Transcription factor PU.1	-	-	Yes	Transcriptional activator that is involved in the differentiation or activation of macrophages or B-cells
miR-150	<i>TRAF2</i>	TNF receptor-associated factor 2	-	-	Yes	Signal transducer for TNFR2 and CD40 that mediates activation of NF-κB.
miR-150	<i>Notch3</i>	Notch homolog 3 (Drosophila)	Yes	Yes	Yes	Receptor for to regulate cell-fate determination
mir-150	<i>TCF8</i>	Transcription factor 8 (represses interleukin 2 expression)	Yes	-	-	Inhibits interleukin 2 gene expression
miR-150	<i>SOCS-7</i>	Suppressor of cytokine signaling 7	-	-	Yes	Regulates cytokine signal transduction
miR-150	<i>STAT4</i>	Signal transducer and activator of transcription 4	-	-	Yes	Mediates responses to IL-12 in lymphocytes, and regulates the differentiation of T helper cells
miR-155	<i>SOCS-1</i>	Suppressor of cytokine signaling 1	Yes	-	Yes	Negative regulator of JAK-STAT signal pathway
miR-155	<i>CTLA4</i>	Cytotoxic T-lymphocyte-associated protein 4	Yes	Yes	-	T cell differentiation and maintenance of peripheral T cell tolerance to self antigens.
miR-155	<i>SOCS-6</i>	Suppressor of cytokine signaling 6	Yes	Yes	-	Regulates cytokine signal transduction
miR-155	<i>PU.1</i>	Transcription factor PU.1	-	-	Yes	Transcriptional activator that is involved in the differentiation or activation of macrophages or B-cells
miR155	<i>JAK2</i>	Janus kinase 2	-	-	Yes	Tyrosine kinase that phosphorylates and activates STATs
miR-155	<i>IL-6</i>	Interleukin-6	-	-	Yes	Cytokine involved in the

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						responses that occur after infection and cellular injury
miR-155	<i>NFAT5</i>	Nuclear factor of activated T-cells, 5	Yes	Yes	-	Part of transcription complex that collectively regulate the immune response
miR-155	<i>CD58</i>	Lymphocyte function-associated antigen 3 precursor	-	-	Yes	Expressed on most hematopoietic cells, especially memory T-cells and dendritic cells
miR-155	<i>CSF1R</i>	Macrophage colony-stimulating factor 1 receptor precursor	-	-	Yes	Receptor for cytokine which controls the production, differentiation, and function of macrophages
miR-155	<i>TRAF6</i>	TNF receptor-associated factor 6	-	-	Yes	Mediates signaling from members of the TNF receptor superfamily, and the Toll/IL-1 family
miR-181a	<i>PIAS-3</i>	Protein inhibitor of activated STAT protein 3	Yes	Yes	Yes	Protein inhibitor of activated STAT family
miR-181a	<i>SOS-1</i>	Son of sevenless homolog 1	-	-	Yes	Activator of ras proteins
miR-181a	<i>IL-2</i>	Interleukin-2	-	-	Yes	Cytokine that is important for the proliferation of T and B lymphocytes
miR-181a	<i>CD163</i>	Scavenger receptor cysteine-rich type 1 protein M130 precursor	Yes	-	Yes	Expressed exclusively on cell surface of monocytes and macrophages that evolve predominantly in the late phase of inflammation
miR-181a	<i>CD4</i>	Homo sapiens CD4 antigen (p55) (CD4)	Yes	-	-	Involved in binding to MHC class II molecules
miR-181a	<i>Smad7</i>	SMAD family member 7	Yes	Yes	-	Component in the signaling pathways of the serine/threonine kinase receptors of the TGF-beta super family.
miR-181a	<i>PTPN9</i>	protein tyrosine phosphatase, non-receptor type 9	Yes	Yes	-	Protein tyrosine phosphatase
miR-181a	<i>HLA-DRA</i>	Major histocompatibility complex, class II, DR alpha precursor	-	-	Yes	MHC class II molecule, presents intracellular peptides to T-cells

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miR-181a	<i>NFATC3</i>	Nuclear factor of activated T-cells, cytoplasmic 3	-	-	Yes	Member of the nuclear factors of activated T cells DNA-binding transcription complex
miR-181a	<i>CD94</i>	Natural killer cells antigen CD94 (NK cell receptor)	-	-	Yes	Receptor for the recognition of MHC class I molecules by NK cells and some cytotoxic T cells
miR-181a	<i>NFAT5</i>	Nuclear factor of activated T-cells, 5	-	Yes	-	Part of transcription complex that collectively regulate the immune response
miR-181a	<i>CD69</i>	CD69 molecule (activation of T-cells)	-	Yes	-	Involved in lymphocyte proliferation
miR-223	<i>NFI-A</i>	Nuclear factor-1A	-	-	Yes	
miR-223	<i>DUSP10</i>	Dual specificity protein phosphatase 10	-	Yes	Yes	Involved in the inactivation of MAP kinases
miR-223	<i>HLF</i>	Hepatic leukemia factor	Yes	Yes	-	Member of the proline and acidic-rich (PAR) protein family
miR-223	<i>PTBP2</i>	polypyrimidine tract binding protein 2	Yes	Yes	-	RNA-binding protein which binds to polypyrimidine tracts.
miR-223	<i>CSF1R</i>	Macrophage colony-stimulating factor 1 receptor precursor	-	-	Yes	Receptor for cytokine which controls the production, differentiation, and function of macrophages
miR-223	<i>TNF-C</i>	Tumor necrosis factor c	-	-	Yes	Induces the inflammatory response and is involved in normal development of lymphoid tissue
miR-223	<i>TRAF3IP3</i>	TRAF3-interacting protein 3	-	-	Yes	May function as adapter molecule, regulating TRAF3-mediated JNK activation
miR-223	<i>SOS-1</i>	Son of sevenless homolog 1	-	-	Yes	Activator of ras proteins
miR-223	<i>TLR3</i>	Toll-like receptor, 3	-	-	Yes	Receptor that recognizes pathogens and activates innate immunity
miR-223	<i>CD94</i>	Natural killer cells antigen CD94	-	-	Yes	Receptor for the recognition of MHC class I molecules by NK cells and some cytotoxic T cells
miR-223	<i>DUSP19</i>	Dual specificity	-	-	Yes	A stress-activated

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		protein phosphatase 19				protein kinase pathway-regulating phosphatase
miR-223	<i>IL-23a</i>	Interleukin-23, alpha	-	-	Yes	Cytokine that preferentially acts on memory CD4(+) T cells