

Product datasheet for **AM06740PU-N**

TPOR (MPL) Mouse Monoclonal Antibody [Clone ID: 1H2]

Product data:

Product Type:	Primary Antibodies
Clone Name:	1H2
Applications:	ELISA, FC, WB
Recommended Dilution:	ELISA: 1/10000. Western Blot: 1/500 - 1/2000. Flow Cytometry: 1/200 - 1/400.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG2b
Clonality:	Monoclonal
Immunogen:	Purified recombinant fragment of Human MPL expressed in E. Coli.
Specificity:	Recognizes MPL/CD110
Formulation:	PBS State: Purified State: Liquid purified antibody Stabilizer: 0.5% protein stabilizer Preservative: 0.05% Sodium Azide
Concentration:	lot specific
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	71.2 kDa
Gene Name:	MPL proto-oncogene, thrombopoietin receptor
Database Link:	Entrez Gene 4352 Human P40238



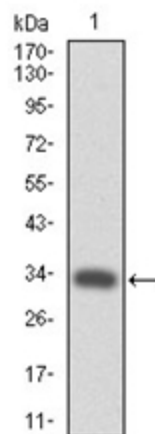
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Background:

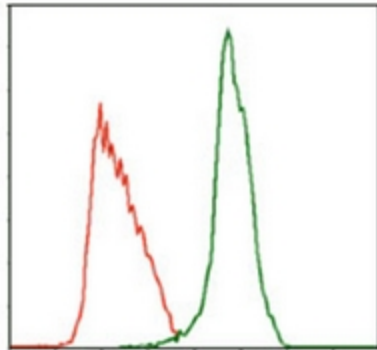
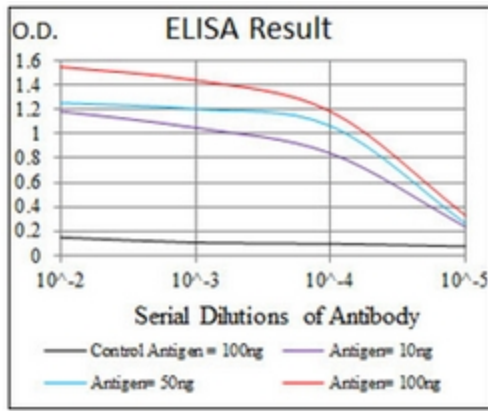
In 1990 an oncogene, v-mpl, was identified from the murine myeloproliferative leukemia virus that was capable of immortalizing bone marrow hematopoietic cells from different lineages. In 1992 the human homologue, named, c-mpl, was cloned. Sequence data revealed that c-mpl encoded a protein that was homologous with members of the hematopoietic receptor superfamily. Presence of anti-sense oligodeoxynucleotides of c-mpl inhibited megakaryocyte colony formation. The ligand for c-mpl, thrombopoietin, was cloned in 1994. Thrombopoietin was shown to be the major regulator of megakaryocytopoiesis and platelet formation. The protein encoded by the c-mpl gene, CD110, is a 635 amino acid transmembrane domain, with two extracellular cytokine receptor domains and two intracellular cytokine receptor box motifs. TPO-R deficient mice were severely thrombocytopenic, emphasizing the important role of CD110 and thrombopoietin in megakaryocyte and platelet formation. Upon binding of thrombopoietin CD110 is dimerized and the JAK family of non-receptor tyrosine kinases, as well as the STAT family, the MAPK family, the adaptor protein Shc and the receptors themselves become tyrosine phosphorylated.

Synonyms:

MPL, TPOR, TPO-R

Product images:

Western blot analysis using MPL antibody against human MPL (AA: 307-362) recombinant protein (Expected MW is 32.2 kDa).



Flow Cytometric analysis of MOLT4 cells using MPL antibody (green) and negative control (red).