

Product Name: MPL Mouse Monoclonal Antibody**Catalog #: AMM81077**

For research use only.

Summary

Description	Mouse monoclonal Antibody
Host	Mouse
Application	ELISA,FC
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG2b
Clonality	Monoclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Purified antibody in PBS with 0.05% sodium azide
Purification	Affinity Purification

Application

Dilution Ratio	ELISA 1:5000-1:20000,FC 1:200-1:400
Molecular Weight	71.2kDa

Antigen Information

Gene Name	MPL
Alternative Names	MPLV; TPOR; C-MPL; CD110
Gene ID	4352.0
SwissProt ID	P40238
Immunogen	Purified recombinant fragment of human MPL expressed in E. Coli.

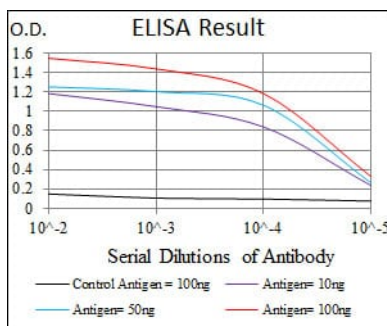
Background

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

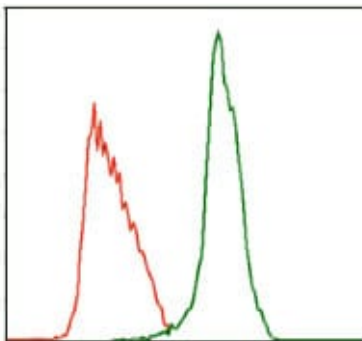
receptor superfamily. Presence of anti-sense oligodeoxynucleotides of c-mpl inhibited megakaryocyte colony formation. The ligand for c-mpl, thrombopoietin, was cloned in 1994. Thrombopoietin was shown to be the major regulator of megakaryocytopoiesis and platelet formation. The protein encoded by the 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.

Research Area

Image Data



Black line: Control Antigen (100 ng); Purple line: Antigen(10ng); Blue line: Antigen (50 ng); Red line: Antigen (100 ng);



Flow cytometric analysis of MOLT4 cells using MPL mouse mAb (green) and negative control (red).