

## ARG82349 Mouse MPL / TPOR ELISA Kit

Package: 96 wells  
Store at: 4°C

### Component

Cat. No.	Component Name	Package	Temp
ARG82349-001	Antibody-coated microplate	8 X 12 strips	4°C. Unused strips should be sealed tightly in the air-tight pouch.
ARG82349-002	Standard	2 X 10 ng/vial	4°C
ARG82349-003	Standard/Sample diluent	30 ml (Ready to use)	4°C
ARG82349-004	Antibody conjugate concentrate (100X)	1 vial (100 µl)	4°C
ARG82349-005	Antibody diluent buffer	12 ml (Ready to use)	4°C
ARG82349-006	HRP-Streptavidin concentrate (100X)	1 vial (100 µl)	4°C
ARG82349-007	HRP-Streptavidin diluent buffer	12 ml (Ready to use)	4°C
ARG82349-008	25X Wash buffer	20 ml	4°C
ARG82349-009	TMB substrate	10 ml (Ready to use)	4°C (Protect from light)
ARG82349-010	STOP solution	10 ml (Ready to use)	4°C
ARG82349-011	Plate sealer	4 strips	Room temperature

### Summary

Product Description	ARG82349 Mouse MPL / TPOR ELISA Kit is an Enzyme Immunoassay kit for the quantification of Mouse MPL / TPOR in serum, plasma (EDTA, heparin) and cell culture supernatants.
Tested Reactivity	Ms
Tested Application	ELISA
Target Name	MPL / TPOR
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	78 pg/ml
Sample Type	Serum, plasma (EDTA, heparin) and cell culture supernatants.
Standard Range	156 - 10000 pg/ml
Sample Volume	100 µl
Precision	Intra-Assay CV: 5.7% Inter-Assay CV: 6.5%

**Alternate Names** Proto-oncogene c-Mpl; MPLV; CD110; Thrombopoietin receptor; C-MPL; TPO-R; Myeloproliferative leukemia protein; TPOR; THCYT2; CD antigen CD110

## Application Instructions

---

**Assay Time** ~ 5 hours

## Properties

---

**Form** 96 well

**Storage instruction** Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.

**Note** For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

---

**Gene Symbol** MPL

**Gene Full Name** MPL proto-oncogene, thrombopoietin receptor

**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. [provided by RefSeq, Jul 2008]

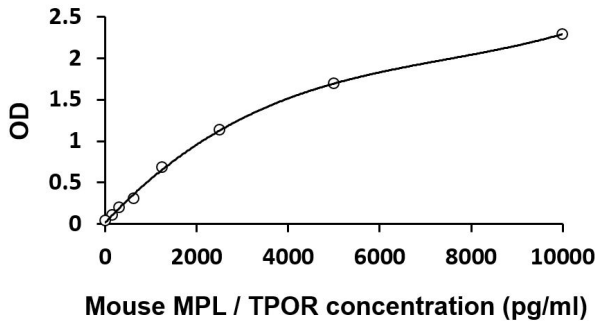
**Function** Receptor for thrombopoietin. May represent a regulatory molecule specific for TPO-R-dependent immune responses. [UniProt]

**Highlight** Related products:

New ELISA data calculation tool:  
[Simplify the ELISA analysis by GainData](#)

**PTM** Ubiquitination at Lys-553 and Lys-573 targets MPL for degradation by both the lysosomal and proteasomal pathways. The E3 ubiquitin-protein ligase CBL significantly contributes to this ubiquitination. [UniProt]

**Cellular Localization** Cell membrane; Single-pass type I membrane protein. Golgi apparatus. Cell surface. [UniProt]



ARG82349 Mouse MPL / TPOR ELISA Kit standard curve image

ARG82349 Mouse MPL / TPOR ELISA Kit results of a typical standard run with optical density reading at 450 nm.