



# Recombinant Mouse Thrombopoietin receptor (Mpl)

<b>Product Code</b>	CSB-MP600093MO
<b>Abbreviation</b>	Mpl
<b>Storage</b>	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
<b>Uniprot No.</b>	Q08351
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Mus musculus (Mouse)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	QDVFLALGTEPLNCFSTFEDLTCFWDEEEAAPSGTYQLLYAYRGEKPRACP LYSQSVP TFGTRYVCQFPAQDEVRLFFPLHLWVKNVSLNQTLIQRVLFVDSVGLPAPPRVI KARGGS QPGELQIHWEAPAPEISDFLRHELRYGPTDSSNATAPSVIQLLSTETCCPTLW MPNPVPV LDQPPCVHPTASQPHGPAPFLTVMKGGSCLVSGLQAGKSYWLQLRSQPDGVS LRGSWGPWS FPVTVDLPGDAVTIGLQCFTLDLKMVTCQWQQQDRTSSQGFFRHSRTRCCPT DRDPTWEK CEEEPRPGSQPALVSRCHFKSRNDSVIHILVEVTTAQQGAVHSYLGSPFWIHQ AVLLPTP SLHWREVSSGRLELEWQHQSAAQETCYQLRYTGEGREDWKVLEPSLGA RGGTLELRPR ARYSLQLRARLNGPTYQGPWSAWSPPARVSTGSETAW
<b>Source</b>	Mammalian cell
<b>Target Names</b>	Mpl
<b>Protein Names</b>	Recommended name: Thrombopoietin receptor Short name= TPO-R Alternative name(s): Myeloproliferative leukemia protein Proto-oncogene c-Mpl CD_antigen= CD110
<b>Expression Region</b>	26-482
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Extracellular domain
<b>Target Details</b>	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.

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**Reconstitution**

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

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**Shelf Life**

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