

Recombinant Mouse TPOR Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51574

Size: 10ug, 100ug

Protein Name: Thrombopoietin receptor (TPO-R) (Myeloproliferative leukemia protein) (Proto-oncogene c-Mpl) (CD antigen CD110)

Synonym: Mpl, Tpor

UniProt ID: Q08351

UniProt Link: www.uniprot.org/uniprotkb/Q08351/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 625 AA

Molecular Weight: 70 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MPSWALFMVTSCLLLALPNQAQVTSQDVFLALGTEPLNCFSSQTFEDLTCFWDEEEAAPSGTYQLL
YAYRGEKPRACPLYSQSVPTFGTRYVCQFPAQDEVRLFFPLHLWVKNVSLNQTLIQRVLFVDSVGLP
APPRVIKARGGSQPGELQIHWEAPAPEISDFLRHELRYGPTDSSNATAPSVIQLLSTETCCPTLWMP
NPVPVLDQPPCVHPTASQPHGPAPFLTVMKGGSCLVSGLQAGKSYWLQLRSQPDGVSLRGSWGPW
SFPVTVDLPDAVTIGLQCFTLDLKMVTCQWQQQDRTSSQGFFRHSRTRCCPTDRDPTWEKCEEE
EPRPGSQPALVSRCHFCSRNDSEVIHILVEVTTAQQGAVHSYLGSPFWIHQAVLLPTPSLHWREVSSGR
LELEWQHQQSSWAAQETCYQLRYTGEGRDQWVLEPSLGARGGTLELRPRARYSLQLRARLNGPTY
QGPWSAWSPPARVSTGSETAWITLVALLVLSLSALLGLLLKWKQFPAHYRRLRHALWPSLPDLHR
VLGQYLRTAALSPSKATVTDSCEEVEPSLLEILPKSSESTPLPLCPSQPQMDYRGLQPCLRTMPLS
VCPMAETGSCCTTHIANHSYLPLSYWQQP

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant Thrombopoietin receptor (TPO-R) (Myeloproliferative leukemia protein) (Proto-oncogene c-Mpl) (CD antigen CD110) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: Receptor for thrombopoietin that regulates hematopoietic stem cell renewal, megakaryocyte differentiation, and platelet formation (PubMed:8630375, PubMed:9122198, PubMed:9639492). Upon activation by THPO, induces rapid tyrosine phosphorylation and activation of JAK2, providing docking sites for many signaling proteins such as STAT5, SHIP/INPP5D, GRB2, SOS1 and PI3K. In turn, These signaling cascades lead to the proliferation, survival, and differentiation of megakaryocytes, ultimately leading to increased platelet production.; [Isoform Mpl-tr]: Acts as an inhibitor of thrombopoietin signaling by promoting protein down-regulation of full-length isoform Mpl-fl.

Subcellular Localization: Cell membrane ; Single-pass type I membrane protein . Golgi apparatus . Cell surface .

6. Notes

- Avoid repeated freeze- thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer- composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.