

Recombinant Human TPOR Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51009

Size: 10ug, 100ug

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

Synonym: MPL, TPOR

UniProt ID: P40238

UniProt Link: www.uniprot.org/uniprotkb/P40238/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 635 AA

Molecular Weight: 71 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MPSWALFMVTSCLLAPQNLAQVSSQDVSLASDSEPLKCFSTRTFEDLTCFWDEEEAAPSGTYQLL
YAYPREKPRACPLSSQSMPHFGTRYVCQFPDQEEVRLFFPLHLWVKNVFLNQTRTRQRVLFVDSVGL
PAPPSIIKAMGGSQPGELQISWEEPAPEISDFLRYELRYGPRDPKNSTGPTVIQLIATETCCPALQRP
HSASALDQSPCAQPTMPWQDGPQTSPSREASALTAEGGSCSLISGLQPGNSYWLQLRSEPDGISL
GGSWGWSLPLVTVDLPGDAVALGLQCFTLDLKNVTCQWQQQDHASSQGFFYHSRARCCPRDRYP
IWENCEEEEEKTNPGLQTPQFSRCHFKSRNDSIIHILVEVTTAPGTVHSYLGSPFWIHQAVRLPTPNLH
WREISSGHLELEWQHPSSWAAQETCYQLRYTGEQHGDWKVLEPPLGARGGTLELRPRSRYLRLQL
RARLNGPTYQGPWSSWSDPTRVETATETAWISLVTALHLVLGLSAVLGLLLLRLWQFPAHYRRLRHA
LWPSLPDLHRVLGQYLRTAALSPPKATVSDTCEEVEPSLLEILPKSSERTPLPLCSSQAQMDYRRL
QPSCLGT MPLSVCPMAESGSCCTTHIANHSYLPLSYWQQP

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. 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 (PubMed:15899890, PubMed:37633268). In turn, These signaling cascades lead to the proliferation, survival, and differentiation of megakaryocytes, ultimately leading to increased platelet production.

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.