

Recombinant Rat EPOR Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52455

Size: 10ug, 100ug

Protein Name: Erythropoietin receptor (EPO-R)

Synonym: Epor

UniProt ID: Q07303

UniProt Link: www.uniprot.org/uniprotkb/Q07303/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 507 AA

Molecular Weight: 56 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MDQLRVARWPRVSPLCLLLAGAAWASSPSLPDPKFESKAALLASRGSEELLCFTQRLEDLVCFWEE
AANSGLMGFNYSFSYQLEGESRKSCRLHQAPTVRGSMRFWCSLPTADTSSFVPLELQVTEASGSPR
YHRIIHINEVLLDAPAGLLARRAEEGSHVLRWLPPPGAPMTTHIRYEVDVSAGNRAGGTQRVEVL
EGRTECVLSNLRGGTRYTFVRARMAEPSFSGFWSAWSEPASLLTASDLPLILTLILVLISLLTV
LALLSHRRALRQKIWP GIPSPENEFEGFLTTHKGNFQLWLLQRDGCLWWSPSSPFPEDPPAHLEVL
SERRWGVTVQAGDAGAEDKGPLEPVGSERAQDTYLVLDEWLLPRCPCSENLSGPGDSVDPATMD
EGSETSSCPSDLASKPRPEGTSPPSFEYTILDPSSKLLCPRALPPELPPTPHLKYLYLVVSDSGISTD
YSSGGSQGVHGDSSDGPYSHPYENSLVPDTEPLRPSYVACS

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 Erythropoietin receptor (EPO-R) 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 erythropoietin, which mediates erythropoietin-induced erythroblast proliferation and differentiation (By similarity). Upon EPO stimulation, EPOR dimerizes triggering the JAK2/STAT5 signaling cascade (By similarity). In some cell types, can also activate STAT1 and STAT3 (By similarity). May also activate the LYN tyrosine kinase (By similarity).; Isoform EPOR-T acts as a dominant-negative receptor of EPOR-mediated signaling.

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

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.