

Recombinant Rat EDN1 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52311

Size: 10ug, 100ug

Protein Name: Endothelin-1 (ET-1) (Preproendothelin-1) (PPET1) [Cleaved into: Big endothelin-1]

Synonym: Edn1

UniProt ID: P22388

UniProt Link: www.uniprot.org/uniprotkb/P22388/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 202 AA

Molecular Weight: 23 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MDYFPVIFSLLFVAFQGAPETAVLGAELSPRAEKEVQSPPPSTSWRPRRSKRCSCSSLMDKECVYF
CHLDIIWVNTPERVVPYGLGSPSRSKRSLKDLLPTKTTDQGNRCQCAHQKDKKCWNFCQADKELRA
QSTMQKGVKDFKKGKPCPKLGKKCIYQQLVEGRKLRRLEAISNSIKTSFRVAKLKAELYRDQKLIHNR
AH

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 Endothelin-1 (ET-1) (Preproendothelin-1) (PPET1) [Cleaved into: Big endothelin-1] 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: Endothelins are endothelium-derived vasoconstrictor peptides (By similarity). Probable ligand for G protein-coupled receptors EDNRA and EDNRB which activates PTK2B, BCAR1, BCAR3 and, GTPases RAP1 and RHOA cascade in glomerular mesangial cells (By similarity). Also binds the DEAR/FBXW7-AS1 receptor (PubMed:9508787). Promotes mesenteric arterial wall remodeling via activation of ROCK signaling and subsequent colocalization of NFATC3 with F-actin filaments (By similarity). NFATC3 then translocates to the nucleus where it subsequently promotes the transcription of the smooth muscle hypertrophy and differentiation marker ACTA2 (By similarity).

Subcellular Localization: Secreted.

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.