

Recombinant Rat PTPRV Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52518

Size: 10ug, 100ug

Protein Name: Receptor-type tyrosine-protein phosphatase V (R-PTP-V) (EC 3.1.3.48) (Embryonic stem cell protein-tyrosine phosphatase) (ES cell phosphatase) (Osteotesticular protein-tyrosine phosphatase) (OST-PTP)

Synonym: Ptprv, Esp

UniProt ID: Q64612

UniProt Link: www.uniprot.org/uniprotkb/Q64612/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 1711 AA

Molecular Weight: 187 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MRPLILLAALLWLQGFLAEDDACSSLEGSPDRQGGGPLLSVNVSSHGKSTSLFLSWVAAELGGFDY
ALSLRSVNSSGSPEGQQLQAHTNESGFEFHGLVPGSRYQLKLTVLRPCWQNVTTITLTARTAPT VVR
GLQLHSAGSPARLEASWSDAPGDQDSYQLLLYHLESQTLACNVSVSPDTLSYSFGDLLPGTQYVLE
VITWAGSLHAKTSILQWTEPVPPDHLALRALGTSSLQAFWNSSEGATSFHMLTDLGGTNTTAVIR
QGVSTHTFLHLSPGTPHELKICASAGPHQIWGPSATEWTYPSPDLVLTPLRNELWASWKAGLGA
RDGYVLKLSGPMESTSTLGPEECNAVFPGPLPPGHYTLQLKVLGPYDAWVEGSTWLAESAALPRE
VPGARLWLDGLEASKQPGRRALLYSDDAPGSLGNISVPSGATHVIFCGLVPGAHYRVDIASSTGDIS
QSIGYTSPLPPQSLEVISRSPSDLTIAWGPAPGQLEGYKVTWHQDGSQRSPGDLVDLGPDTLSLT
LKSLVPGSCYTVAWAWAGNLDSDSQKIHSCTRPAPPTNLSLGFHQAALKASWYHPPGGRDAF
HLRLYRLRPLTLESEKVLPREAQNFSWAQLTAGCEFQVQLSTLWGSESRSSANATGWTPPSAPTLV
NVTSDAPTQLQVSWAHVPGGRSRYQVTLYQESTRTATSIMGPKEDGTSFLGLTPGTTYKVEVISWA
GPLYTAAANVSAWTYPLIPNELLVSMQAGSAVVNLAWPSGPLGQGACHAQLSDAGHLSWEQPLKL
GQELFMLRDLTPGHTISMSVRCRAGPLQASTHLVVLVSEPGPVEDVLCHPEATYLALNWTMPAGDV
DVCLVVVERLVPGGGTHFVFQVNTSGDALLLPNLMPTTSYRLSLTVLGRNSRWSRAVSLVCSTSAE
AWHPPELAEPQVELGTGMGVTVMRGMFGKDDGQIQWYGIATINMTLAQPSREAINYTWDHYR
GCESFLALLFPNPFYPEPWAGPRSWTPVGTEDCDNTQEICNGRLKSGFQYRFSVVAFSRLNTPETI
LAFSAFSEPRASISLAIPLTVMLGAVVGSIVIVCAVLCLLRWRLCKGPRSEKDGFSKELMPYNLWRTH



RPIPIHSFRQSYEAKSAHAHQTFQEFEEELKEVGKDQPRLEAEHPDNIKNRYPHVLPYDHSRVRLTQ
LPGEPHSDYINANFIPGYSHTQEIIATQGPKKTLEDFWRLVWEQQVHVIIIMLTVMENGRVLCHEHYW
PANSTPVTHGHITIHLLAEEPEDWTRREFQLQHGTQKQRRVKQLQFTTWPDSVPEAPSSLLAFV
ELVQEQQVQATQGKGPILVHCSAGVGRGTGFVALLRLLRQLEEEKVADVFNNTVYILRLHRPLMIQTLSQ
YIFLHSCLLNKILEGPPDSSDSGPISVMDFAQACAKRAANANAGFLKEYKLLKQAIKDGTGSLLPPPD
YNQNSIVSRHSQEQQFALVEECPEDSMLEASLFPGGPSGCDHVLTGSAGPKELWEMVWEHDAHV
LVSLGLPDTKEKPPDIWPVEMQPIVTDMMTVHRVSESNTTTGWPSTLFRVIHGESGKERQVQCLQFP
CSESGCELPAANTLLTFLDAVGQCCFRGKSKKPGTLLSHSSKNTNQLGTFLAMEQLLQQAGTERTVD
VFNVALKQSQACGLMPTTLEQYIYLYNCLNSALLNGLPRAGKWPAPC

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 Receptor-type tyrosine-protein phosphatase V (R-PTP-V) (EC 3.1.3.48) (Embryonic stem cell protein-tyrosine phosphatase) (ES cell phosphatase) (Osteotesticular protein-tyrosine phosphatase) (OST-PTP) 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: Protein tyrosine phosphatase that acts as a regulator of energy metabolism (By similarity). Prevents decarboxylation of osteocalcin (Bglap) via an indirect mechanism, preventing the hormone activity of osteocalcin (By similarity). Functions in signaling pathways during bone remodeling, as well as serve a broader role in cell interactions associated with differentiation in bone and testis (PubMed:7527035). Associated with differentiation in bone and testis (PubMed:7527035).

Subcellular Localization: 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.