

Recombinant Mouse PTPRD Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51683

Size: 10ug, 100ug

Protein Name: Receptor-type tyrosine-protein phosphatase delta (Protein-tyrosine phosphatase delta) (R-PTP-delta) (EC 3.1.3.48)

Synonym: Ptpd

UniProt ID: Q64487

UniProt Link: www.uniprot.org/uniprotkb/Q64487/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 1912 AA

Molecular Weight: 214 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MVPVARPLSLLLTFFLCACAETPPRFTRTPVDQTVSGGVASFICQATGDPRPKIVWNKKGKKVSNQ
RFEVIEFDGSGSVLRIQPLRTPRDEAIYECVASNNVGEISVSTRLTVLREDQIPRGFPTIDMGPQLKV
VERTRTATMLCAASGNPDPEITWFKDFLPVDTSNNNGRIKQLRSESIGGTPIRGALQIEQSESDQGG
YECVATNSAGTRYAPANLYVRELREVRVPPRFSIPPTNHEIMPGGSVNITCVAVGSPMPYVKWM
LGAEDLTPEDDMPIGRNVLELNDVRQSANYTCVAMSTLGVIEAIAQITVKALPKPPGTPVVTESTATS
TLTWDSGNPEPVSYIIQHKPKNSEEPYKEIDGIATTRYSVAGLSPYSDYEFVAVNNIGRGPASEP
VLTQTSEQAPSSAPRDVQARMLSTTILVQWKEPEEPNGQIQGYRVYYTMDPTQHVNNWMKHNVA
DSQITTIGNLVPQKTYSVKVLAFSTIGDGPLSSDIQVITQTGVPGQPLNFKAEPESETILLSWTPPRS
DTIASYELVYRDGDQGEEQRITIEPGTSYRLQGLKPNLSYFRLSARSPQGLGASTAEISARTMQSKP
SAPPQDISCTSPSSTSILVSWQPPPVEKQNGIITEYSLKYAAVDGEDFKPHEILGIPSDTTKYLLEQLEK
WTEYRITVTAHTDVGPGESLSVLIRTDDEVPSGPPRKVEVEAVNATAVKVSWRSPVPNKQHGQIR
GYQVHYVKMENGEKGPMLKDVMLADAQWFEDDTTEHDMIISGLQPETSYSLTVTAYTTKGDGA
RSKPKLVSTTGAVPGKPRLVINHTQMNTALIQWHPPVDTFGLQGYRLKFGRKDMEPLTTLEFSEKE
DHFTATDIHKGASYVFRLSARNKVGFGGEEMVKEISVPEEPTGFPQNLHSEGTSTSVQLSWQPPVL
AERNGVITKYTLTYRDINVPPLPMEHLIVPADTSMTLTGLKSDTTYDVKVRHAHTSKGPGPYSPSVQFR
TLPVDQVFAKNFHVKAVMKTSVLLSWEIPENYNSAMPFKILYDDGKMVEEVDGRATQKLIVNLKPEK
SYSFVLTNRGNSAGGLQHRVTAKTAPDVLRTKPAFIGKTNLDGMITVQLPDV PANENIKGYYIIIVPLK
KSRGKFIKPWESPDEMEDELLEKISRKRRSIRYGREVELKPYIAAHFDVLPTEFTLGDDKHYYGGFTN



KQLQSGQEYVFFVLAVMDHAESKMYATSPYSDPVVSMDLDPQPITDEEEGLIWWVGPVLAVVFIICIVI
AILLYKRKRAESESRLKSSLPNSKEVPSHHPTDPVELRRLNFQTPGMASHPPPILELADHIERLKANDN
LKFSQEYESIDPGQQFTWEHSNLEVNKPKNRYANVIAYDHSRVLLSAIEGIPGSDYVNANYIDGYRKQ
NAYIATQGSLPETFGDFWRMIWEQRSATVMMTKLEERSRVKCDQYWPSRGTEHGLVQVTLLDT
VELATYCVRTFALYKNGSSEKREVRQFQFTAWPDHGVPEHPTPFLAFLRRVKTCNPPDAGPMVVH
CSAGVGRTGCFIVIDAMLERIKHEKTVDIYGHVTLMRAQRNVMVQTEDQYIFIHDALLEAVTCGNTEV
PARNLYAYIQKLTQIETGENVTGMELEFKRLASSKAHTSRFISANLPCNKFNRLVNIMPYESTRVCL
QPIRGVEGSDYINASFLDGYRQQKAYIATQGGLAETTEDFWRMLWEHNSTIVVMLTKLREMGREKC
HQYWPAERSARYQYFVVDPMAYNMPQYILREFKVTDARDGQSRTVRQFQFTDWPEQGVPKSGE
GFIDFIGQVHKTKEQFGQDGPISVHCSAGVGRTGVFITLSIVLERMRYEGVVDIFQTVKMLRTQRPAM
VQTEDQYQFCYRAALEYLGSFDHYAT

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 delta (Protein-tyrosine phosphatase delta) (R-PTP-delta) (EC 3.1.3.48) 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: Can bidirectionally induce pre- and post-synaptic differentiation of neurons by mediating interaction with IL1RAP and IL1RAPL1 trans-synaptically (PubMed:25908590). Involved in pre-synaptic differentiation through interaction with SLITRK2 (PubMed:25989451).

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.