Recombinant PTPRR protein (His tag)

Catalog Number	542709
Synonyms	R-PTP-R; Ch-1PTPase; NC-PTPCOM1; Protein-tyrosine phosphatase PCPTP1
Species	Human
Expression System	E. coli
Accession	Q15256
Molecular Weight	Predictes a molecular mass of 35.62 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 36 kDa band.

Product Information

Sequence Region	360-657
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 360-657 aa (Q15256) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human Receptor-type tyrosine-protein phosphatase R (R-PTP-R) fragment (residues 360-657), encompassing the complete Tyrosine-protein phosphatase domain. This high-purity protein is an essential tool for investigating phosphatase activity, MAPK regulation, and cytoplasmic signaling mechanisms in cellular studies. Receptor-type tyrosine-protein phosphatase R (R-PTP-R), encoded by the PTPRR gene in humans, functions as a key regulator of mitogen-activated protein kinases (MAPKs) including MAPK1, MAPK3, and MAPK14. It sequesters these MAPKs in the cytoplasm in an inactive form through a dephosphorylated kinase interacting motif. Phosphorylation of this motif by the protein kinase A complex releases MAPKs for activation and nuclear translocation. The full-length protein exhibits complex subcellular localization, with different isoforms found at the cell membrane (isoform Alpha) or in perinuclear cytoplasmic regions (isoforms Delta and Gamma), and has also been identified in secreted form. This strategic localization enables R-PTP-R to precisely control MAPK signaling pathways critical for cellular responses to external stimuli.