Recombinant BMPR2 protein (His tag)

Catalog Number	542652
Synonyms	BMP type-2 receptor; BMPR-2; Bone morphogenetic protein receptor type II; BMP type II receptor; BMPR-II
Species	Human
Expression System	E. coli
Accession	Q13873
Molecular Weight	Predictes a molecular mass of 15.09 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 15 kDa band.

Product Information

Sequence Region	31-150
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 31-150 aa (Q13873) 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	This recombinant protein product features a stable and soluble fragment (amino acids 31-150) of the human Bone Morphogenetic Protein Receptor Type-2 (BMPR-2), a key transmembrane serine/threonine kinase receptor. Engineered for structural and biochemical studies, this fragment provides an accessible tool for investigating BMPR-2's signaling mechanisms without the complexities of the full-length membrane protein. Bone Morphogenetic Protein Receptor Type-2 (BMPR-2) is a Single-pass type I membrane protein located at the cell membrane. It functions as part of a receptor complex that, upon ligand binding (such as BMP7, BMP2, BMP4, or activin A), activates SMAD transcriptional regulators and the p38MAPK cascade, playing critical roles in cellular signaling pathways including adipogenesis induction by GDF6. Its involvement in phosphorylation-mediated activation of type I receptors underscores its importance in developmental and cellular processes.