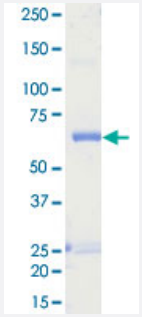
Bioactive

BMPR1B (Human) Recombinant Protein

Catalog # P5498 Size 5 ug

Applications



Result of activity analysis

Result of activity analysis

Specification

Product Description	Human BMPR1B (NP_001194.1, 149 a.a. - 502 a.a.) partial recombinant protein with GST tag expressed in baculovirus infected Sf21 cells.
Host	insect
Theoretical MW (kDa)	67
Form	Liquid
Preparation Method	Baculovirus infected insect cell (Sf21) expression system
Purification	Glutathione sepharose chromatography
Purity	76 % by SDS-PAGE/CBB staining

Activity	The activity was measured by off-chip mobility shift assay. The enzyme was incubated with fluorescence-labeled substrate and Mg(or Mn)/ATP. The phosphorylated and unphosphorylated substrates were separated and detected by LabChip 3000. Substrate: Topolla peptide. ATP: 200 uM.
Quality Control Testing	Loading 1 ug protein in SDS-PAGE
Storage Buffer	In 50 mM Tris-HCl, 150 mM NaCl, pH 7.5 (0.1% CHAPS, 1 mM DTT, 10% glycerol)
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Result of activity analysis Result of activity analysis

Applications

- Functional Study
- SDS-PAGE

Gene Info — BMPR1B

Entrez GeneID	658
Protein Accession#	NP_001194.1
Gene Name	BMPR1B
Gene Alias	ALK-6, ALK6, CDw293
Gene Description	bone morphogenetic protein receptor, type IB
Omim ID	112600 603248
Gene Ontology	Hyperlink
Gene Summary	This gene encodes a member of the bone morphogenetic protein (BMP) receptor family of transmembrane serine/threonine kinases. The ligands of this receptor are BMPs, which are members of the TGF-beta superfamily. BMPs are involved in endochondral bone formation and embryogenesis. These proteins transduce their signals through the formation of heteromeric complexes of 2 different types of serine (threonine) kinase receptors: type I receptors of about 50-55 kD and type II receptors of about 70-80 kD. Type II receptors bind ligands in the absence of type I receptors, but they require their respective type I receptors for signaling, whereas type I receptors require their respective type II receptors for ligand binding. Mutations in this gene have been associated with primary pulmonary hypertension. [provided by RefSeq

Other Designations	OTTHUMP00000161622|activin receptor-like kinase 6|serine/threonine receptor kinase

Pathway

- Cytokine-cytokine receptor interaction
- TGF-beta signaling pathway

Disease

- Adenomatous Polyposis Coli
- Cleft Lip
- Cleft Palate
- Colon cancer
- Colonic Neoplasms
- Genetic Predisposition to Disease
- Obesity
- Ovarian Failure
- Polycystic Ovary Syndrome
- Puberty
- Thrombophilia
- Tobacco Use Disorder