

Bioactive

BMPR1A (Human) Recombinant Protein

Catalog # P6242

Size 100 ug

Applications

Result of activity analysis

Result of activity analysis

□

Specification

Product Description

Human BMPR1A (P36894) recombinant protein expressed in CHO cells.

Sequence

QNLDSMLHGTGMKSDSDQKKSENGVTLPEDTLPFLKCYCSGHCPDDAINNTCITNGHCFAIIIE
 DDQGETTLASGCMKYEGSDFQCKDSPKAQLRRTIECCRTNLCNQYLQPTLPPVVIGPFFDGSIRIE
 GRMDDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV
 DGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPR
 EPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSGDSFFLYSK
 LTVDKSRWQQGNVFSVSMHEALHNHYTQKSLSLSPGK

Host

Mammals

Theoretical MW (kDa)

40.4/80.8

Form

Lyophilized

Purity

 $\geq 95\%$

Endotoxin Level

 ≤ 1 EUs/ug (Kinetic LAL) (50% confidence)

Activity

 $ED_{50} \leq 120$ ng/mL

Inhibition of human BMP-4-induced alkaline phosphatase production by ATDC5 cells

The values provided above are minimum expected values to pass internal requirements.

Quality Control Testing	Reducing and Non-Reducing SDS PAGE
Conformation	Dimer
Storage Buffer	Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing PBS.
Storage Instruction	Stored at -20°C to -80°C for 12 month. After reconstitution with sterile water at 0.1 mg/mL, store at -20°C to -80°C for 3 months, store at 4°C for 1 month. Aliquot to avoid repeated freezing and thawing.
Note	Result of activity analysis Result of activity analysis

Applications

- Functional Study

Gene Info — BMPR1A

Entrez GeneID	657
Protein Accession#	P36894
Gene Name	BMPR1A
Gene Alias	10q23del, ACVRLK3, ALK3, CD292
Gene Description	bone morphogenetic protein receptor, type IA
Omim ID	158350 174900 601299 610069
Gene Ontology	Hyperlink
Gene Summary	The bone morphogenetic protein (BMP) receptors are a family of transmembrane serine/threonine kinases that include the type I receptors BMPR1A and BMPR1B and the type II receptor BMPR2. These receptors are also closely related to the activin receptors, ACVR1 and ACVR2. The ligands of these receptors are members of the TGF-beta superfamily. TGF-betas and activins transduce their signals through the formation of heteromeric complexes with 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. [provided by RefSeq]
Other Designations	OTTHUMP00000020014 activin A receptor, type II-like kinase 3

Pathway

- [Cytokine-cytokine receptor interaction](#)
- [TGF-beta signaling pathway](#)

Disease

- [Adenomatous Polyposis Coli](#)
- [Alzheimer Disease](#)
- [Anemia](#)
- [Bacteremia](#)
- [Chromosome Deletion](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Colon cancer](#)
- [Colonic Neoplasms](#)
- [Diabetes Mellitus](#)
- [Gastrointestinal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Insulin Resistance](#)
- [Intestinal Polyposis](#)
- [Intestinal Polyps](#)
- [Kidney Failure](#)
- [Liver Cirrhosis](#)
- [Neoplastic Syndromes](#)
- [Obesity](#)
- [Ovarian Failure](#)
- [Peutz-Jeghers Syndrome](#)

- [Polycystic Ovary Syndrome](#)
- [Polyps](#)
- [Precancerous Conditions](#)
- [Puberty](#)
- [Stomach Neoplasms](#)
- [Telangiectasia](#)
- [Thrombophilia](#)
- [Tobacco Use Disorder](#)