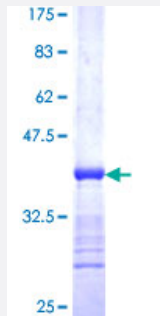


ACVR1B (Human) Recombinant Protein (Q01)

Catalog # H00000091-Q01

Size 25 ug, 10 ug

Applications



Specification

Product Description	Human ACVR1B partial ORF (AAH00254, 24 a.a. - 126 a.a.) recombinant protein with GST-tag at N-terminal.
Sequence	SGPRGVQALLCACTSC LQANYTCETDGACMVSIFNLDGMEHHVRTCIPKVELVPAGKPFYCLSS EDLRNTHCCYTDYCNRIDLRVPSGHLKEPEHPSMWGPVE
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	36.96
Interspecies Antigen Sequence	Mouse (93); Rat (95)
Preparation Method	in vitro wheat germ expression system
Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — ACVR1B

Entrez GeneID [91](#)

GeneBank Accession# [BC000254](#)

Protein Accession# [AAH00254](#)

Gene Name ACVR1B

Gene Alias ACTRIB, ACVRLK4, ALK4, SKR2

Gene Description activin A receptor, type IB

Omim ID [601300](#)

Gene Ontology [Hyperlink](#)

Gene Summary

Activins are dimeric growth and differentiation factors which belong to the transforming growth factor-beta (TGF-beta) superfamily of structurally related signaling proteins. Activins signal through a heteromeric complex of receptor serine kinases which include at least two type I (I and IB) and two type II (II and IIB) receptors. These receptors are all transmembrane proteins, composed of a ligand-binding extracellular domain with a cysteine-rich region, a transmembrane domain, and a cytoplasmic domain with predicted serine/threonine specificity. Type I receptors are essential for signaling, and type II receptors are required for binding ligands and for expression of type I receptors. Type I and II receptors form a stable complex after ligand binding, resulting in phosphorylation of type I receptors by type II receptors. This gene encodes activin A type IB receptor, composed of 11 exons. Alternative splicing and alternative polyadenylation result in 3 fully described transcript variants. The mRNA expression of variants 1, 2, and 3 is confirmed, and a potential fourth variant contains an alternative exon 8 and lacks exons 9 through 11, but its mRNA expression has not been confirmed. [provided by RefSeq]

Other Designations

activin A receptor, type II-like kinase 4|activin A type IB receptor|activin receptor-like kinase 4|serine(threonine) protein kinase receptor R2

Pathway

- [Adherens junction](#)
- [Chronic myeloid leukemia](#)
- [Colorectal cancer](#)
- [Cytokine-cytokine receptor interaction](#)
- [Endocytosis](#)
- [MAPK signaling pathway](#)
- [Pancreatic cancer](#)
- [Pathways in cancer](#)
- [TGF-beta signaling pathway](#)

Disease

- [Genetic Predisposition to Disease](#)
- [Head and Neck Neoplasms](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Obesity](#)
- [Ovarian Failure](#)
- [Polycystic Ovary Syndrome](#)
- [Puberty](#)
- [Schizophrenia](#)
- [Thrombophilia](#)
- [Tobacco Use Disorder](#)