

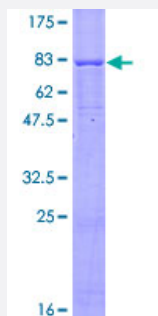
Full-Length

ACVR1B (Human) Recombinant Protein (P01)

Catalog # H00000091-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human ACVR1B full-length ORF (AAH00254.1, 1 a.a. - 505 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MAESAGASSFFPLVLLLAGSGGSGPRGVQALLCACTSCSQANYTCETDGACMVSIFNLDGMEH
HVRTCIPKVELVPAGKPFYCLSSDLRNTHCCYTDYCNRIDLRVPSGHLKEPEHPSMWGPVELVG
IIAGPVFLLFLIIIVFLVINHQYVYHNRQLDMEDPSCMCLSKDKTLQDLVYDLSTSGSGSGLPLF
VQRTVARTIVLQEIIGKGRFGEVWRGRWRGGDVAVKIFSSREERSWFREAIEYQTVMLRHENILGFI
AADNKDNGTWTQLWLVS DYHEHGS LFDYLNRYTVTIEGMKLALSAASGLAHLHMEMVGTQ GKPGI
AHRDLKSKNILVKKNGMCAIADLGLAVRHDAVTDITDIAPNQ RVG TKRYMAPEVLDETINMKHFDS
FKCADIYALGLVYWEIARRCNSGGVHEEYQLPYYDLVP SDPSIEEMRKVVCDQKL RPNIPNWWQS
YEALRVMGKMMREC WYANGAARLTALRIKKTLSQLSVQEDVKI

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

81.29

Interspecies Antigen Sequence

Mouse (98); Rat (99)

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#	AAH00254.1
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](#)