

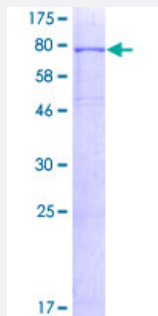
Full-Length

ACVR1 (Human) Recombinant Protein (P01)

Catalog # H00000090-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human ACVR1 full-length ORF (AAH33867, 1 a.a. - 509 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MVDGVMILPVLIMIALPSPSMEDEKPKVNPPLYMCVCEGLSCGNEDHCEGQQCFSSLSINDGFH
VYQKGCFQVYEQGKMTCKTPSPGQAVECCQGDWCNRNITAQLPTKGKSFPGTQNFHLEVGLIIL
SVVFAVCLLACLLGVALRKFKRRNQERLNPRDVEYGTIEGLITNVGDSTLADLLDHSTSGSGSG
LPFLVQRTVARQITLLECVGKGGRYGEVWRGSWQGENVAVKIFSSRDEKSWFRETELNTVMLRH
ENILGFASDMTSRHSSTQLWLITHYHEMGSLYDYLLTLDTVSCLRIVLSIASGLAHLHIEIFGTQGK
PAIAHRDLKSKNILVKKNGQCCADLGLAVMHSQSTNQLDVGNNPRVGTKRYMAPEVLDETIQVD
CFDSYKRVDWAFGLVLWEVARRMVSNQVEDYKPPFYDVVPNDPSFEDMRKVVCVDQQRPNIP
NRWFSPTLTSLAKLMKECWYQNPSARLTALRIKKTTLTKIDNSLDKLTDC

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

81.73

Interspecies Antigen Sequence

Mouse (98); Rat (97)

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 — ACVR1

Entrez GeneID [90](#)

GeneBank Accession# [BC033867](#)

Protein Accession# [AAH33867](#)

Gene Name ACVR1

Gene Alias ACTRI, ACVR1A, ACVRLK2, ALK2, FOP, SKR1, TSRI

Gene Description activin A receptor, type I

Omim ID [102576 135100](#)

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 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 I receptor which signals a particular transcriptional response in concert with activin type II receptors. Mutations in this gene are associated with fibrodysplasia ossificans progressive. [provided by RefSeq]

Other Designations

TGF-B superfamily receptor type II|activin A receptor, type II-like kinase 2|activin A type I receptor|hydroxyalkyl-protein kinase|serine/threonine-protein kinase receptor R1

Pathway

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

Disease

- [Abortion](#)
- [Breast Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Infertility](#)
- [Intracranial Aneurysm](#)
- [Narcolepsy](#)
- [Neoplasms](#)
- [Obesity](#)
- [Ovarian cancer](#)
- [Ovarian Failure](#)
- [Ovarian Neoplasms](#)
- [Polycystic Ovary Syndrome](#)

- [Prostate cancer](#)
- [Prostatic Neoplasms](#)
- [Puberty](#)
- [Stroke](#)
- [Thrombophilia](#)
- [Tobacco Use Disorder](#)