

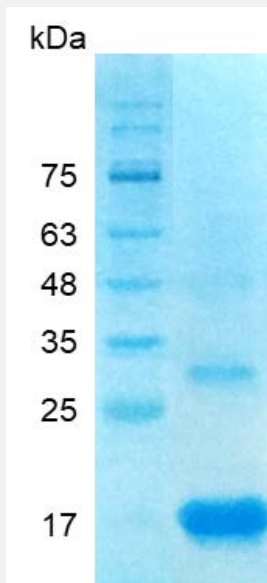
Bioactive

ACVR1 (Human) Recombinant Protein

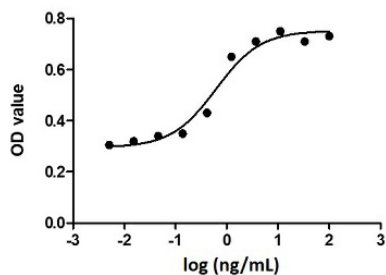
Catalog # P7840

Size 20 ug

Applications



SDS-PAGE analysis of ACVR1 (Human) Recombinant Protein.



Result of activity analysis

Result of activity analysis

Specification

Product Description

Human ACVR1 recombinant protein with polyhistidine tag at the C-terminus expressed in *Escherichia coli*.

Sequence

MGLECDGKVNICCKKQFFVSFKDIGWNDWIIAPSGYHANYCEGECPSHIAGTSGSSLSFHSTVINHYRMGRGHSPFANLKSCCVPTKLRPMSMLYDDGQNIKKDIQNMIVEECGCS with polyhistidine tag at the C-terminus.

Host

Escherichia coli

Form	Lyophilized
Preparation Method	<i>Escherichia coli</i> expression system
Purification	Ni-NTA chromatography
Purity	> 95% as determined by SDS-PAGE.
Endotoxin Level	< 0.1 EU/ ug of protein by the LAL method.
Activity	ED ₅₀ < 0.85 ng/mL, Measured by the induction of induce hemoglobin expression in K562 cells. The specific activity of recombinant human Activin A is > 1.4 x 10 ³ IU/mg.
Quality Control Testing	SDS-PAGE Stained with Coomassie Blue. SDS-PAGE analysis of ACVR1 (Human) Recombinant Protein.
Recommend Usage	Biological Activity SDS-PAGE The optimal working dilution should be determined by the end user.
Storage Buffer	Lyophilized from a solution containing 0.1% sarkosyl in 1X PBS, pH 8.0. Reconstitute the lyophilized powder in ddH ₂ O to 100 ug/mL.
Storage Instruction	Lyophilized protein should be stored at -20°C. Protein aliquots should be stored at -20°C to -80°C. The product is stable for one year. Avoid repeated freeze/thaw cycles.
Note	Result of activity analysis Result of activity analysis

Applications

- Functional Study
- SDS-PAGE

Gene Info — ACVR1

Entrez GeneID	90
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](#)