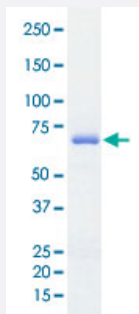


Bioactive

ACVR2A (Human) Recombinant Protein

Catalog # P5491 Size 5 ug

Applications



Result of activity analysis

Result of activity analysis

□

Specification

Product Description	Human ACVR2A (NP_001607.1, 162 a.a. - 513 a.a.) partial recombinant protein with GST tag expressed in baculovirus infected Sf21 cells.
Host	insect
Theoretical MW (kDa)	67
Form	Liquid
Preparation Method	Baculovirus infected insect cell (Sf21) expression system
Purification	Glutathione sepharose chromatography
Purity	95 % by SDS-PAGE/CBB staining

Activity	The activity was determined by ELISA. The enzyme was incubated with biotinylated substrate protein , and after stopping kinase reaction by EDTA, the reaction solution was transferred into streptavidin-coated plate. Phosphorylation was detected by anti-phospho antibody and HRP-labeled anti-rabbit Ig G. Substrate: ALK4 inactive mutant. ATP: 100 uM.
Quality Control Testing	Loading 1 ug protein in SDS-PAGE
Storage Buffer	In 50 mM Tris-HCl, 150 mM NaCl, pH 7.5 (0.1% CHAPS, 1 mM DTT, 10% glycerol)
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Result of activity analysis Result of activity analysis

Applications

- Functional Study
- SDS-PAGE

Gene Info — ACVR2A

Entrez GeneID	92
Protein Accession#	NP_001607.1
Gene Name	ACVR2A
Gene Alias	ACTRII, ACVR2
Gene Description	activin A receptor, type IIA
Omim ID	102581
Gene Ontology	Hyperlink

Gene Summary

This gene encodes activin A type II receptor. 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. Type II receptors are considered to be constitutively active kinases. [provided by RefSeq]

Other Designations

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Pathway

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

Disease

- [Breast Neoplasms](#)
- [Colon cancer](#)
- [Colonic Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Genomic Instability](#)
- [Hyperparathyroidism](#)
- [Neoplasms](#)
- [Obesity](#)
- [Ovarian cancer](#)
- [Ovarian Failure](#)
- [Ovarian Neoplasms](#)
- [Polycystic Ovary Syndrome](#)
- [Pre-Eclampsia](#)

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