Active Recombinant Human ACVR1 Protein, GST-tagged

Cat. No. ACVR1-246H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Human ACVR1 (NP_001096.1, 145 a.a. - 509 a.a.) partial recombinant protein with GST tag expressed in Baculovirus infected Sf21 cells.
Species	Human
Source	Insect Cells
ProteinLength	145-509 a.a.
Description	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, Jul 2008]
Form	Liquid

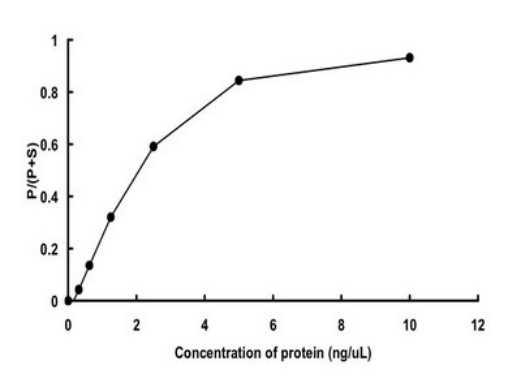
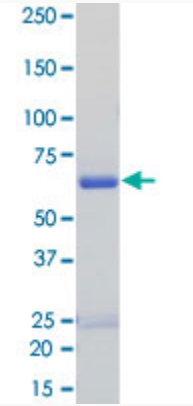
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Bio-activity	The activity was measured by off-chip mobility shift assay. The enzyme was incubated with fluorescence-labeled substrate and Mg (or Mn)/ATP. The phosphorylated and unphosphorylated substrates were separated and detected by LabChip™3000. Substrate : TopoIIa peptide. ATP: 100 μM.
Molecular Mass	69 kDa
Purity	82 % by SDS-PAGE/CBB staining
Applications	Functional Study SDS-PAGE
Storage	Store at -80 centigrade. Aliquot to avoid repeated freezing and thawing.
Storage Buffer	In 50 mM Tris-HCl, 150 mM NaCl, pH 7.5 (0.05% Brij35, 1 mM DTT, 10% glycerol)

GENE INFORMATION

Gene Name	ACVR1 activin A receptor, type I [Homo sapiens]
Official Symbol	ACVR1
Synonyms	ACVR1; activin A receptor, type I; ACVRLK2; activin receptor type-1; ACVR1A; ALK2; SKR1; activin receptor type I; hydroxyalkyl-protein kinase; activin receptor-like kinase 2; TGF-B superfamily receptor type I; activin A receptor, type II-like kinase 2; serine/threonine-protein kinase receptor R1; FOP; TSRI; ACTRI;
Gene ID	90
mRNA Refseq	NM_001105

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Protein Refseq	NP_001096
MIM	102576
UniProt ID	Q04771
Result of activity analysis	
	 SDS-PAGE Stained with Coomassie Blue

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