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# Recombinant Human Activin receptor type-2B/ACVR2B Protein



Catalog No.: RP00302

Recombinant

## **Sequence Information**

**Species Gene ID Swiss Prot** Human 93 Q13705

**Tags** C-6×His

**Synonyms** 

ACVR2B;ACTRIIB;ActR-IIB;HTX4

## **Product Information**

**Source**HEK293 cells
Purification
> 95% by SDSPAGE.

#### **Endotoxin**

< 1 EU/µg of the protein by LAL method.

## **Formulation**

Lyophilized from a 0.2 µm filtered solution of 20 mM PB, 150 mM NaCl, pH 7.4.Contact us for customized product form or formulation.

## Reconstitution

Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water.

## **Background**

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. This gene encodes activin A type IIB receptor, which displays a 3- to 4-fold higher affinity for the ligand than activin A type II receptor.

## **Basic Information**

### **Description**

Recombinant Human Activin receptor type-2B/ACVR2B Protein is produced by Human Cell expression system. The target protein is expressed with sequence (Ser19-Thr134) of human Activin receptor type-2B/ACVR2B (Accession #Q13705) fused with a  $6\times$ His tag at the C-terminus.

### **Bio-Activity**

Measured by its ability to inhibit Activin A-induced hemoglobin expression in K562 human chronic myelogenous leukemia cells. Approximately 0.3-1  $\mu$ g/mL of rhActivin RIIB will inhibit 50% of the biological response due to 3  $\mu$ g/mL of rhActivin A.

#### Storage

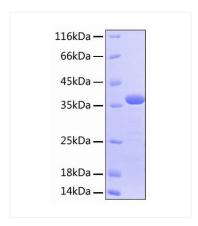
Store the lyophilized protein at -20 °C to -80 °C for long term. <br/>  $\pm$  constitution, the protein solution is stable at -20 °C for 3 months, at 2-8 °C for up to 1 week. Avoid repeated freeze/thaw cycles.

## **Contact**



www.abclonal.com

# **Validation Data**



Recombinant protein Human Activin receptor type-2B/ACVR2B was determined by SDS-PAGE under reducing conditions with Coomassie Blue, showing a band at 37 kDa.