Cynomolgus ACVR2B / ACTRIIB Protein (Fc Tag)

Catalog Number: **90056-C02H**

Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

ACVR2B

Protein Construction:

A DNA sequence encoding the cynomolgus ACVR2B (EHH16502.1) (Ser28-Thr143) was expressed with the Fc region of human IgG1 at the C-terminus.

Source: Cynomolgus

Expression Host: Human Cells

QC Testing

Purity: > 90 % as determined by SDS-PAGE

Bio-Activity

Measured by its ability to neutralize Activin-mediated inhibition on MPC11 cell proliferation.
The ED50 for this effect is typically 10-40 ng/mL in the presence of 10 ng/mL recombinant Activin A.

Endotoxin:

< 1.0 EU per μg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Ser 28

Molecular Mass:

The recombinant cynomolgus ACVR2B comprises 357 amino acids and has a calculated molecular mass of 40.3 KDa.The apparent molecular mass of the protein is approximately 54-62 KDa in SDS-PAGE.

Formulation:

Lyophilized from sterile PBS, pH 7.4.

Normally 5 % - 8 % trehalose and mannitol are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

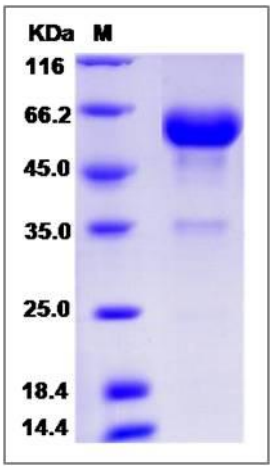
Usage Guide

Storage:

Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

SDS-PAGE:



Reconstitution:

Detailed reconstitution instructions are sent along with the products.

Protein Description

Activin A receptor, type I?IB, also known as ACTRIIB, or ACVR2B, is an activin type 2 receptor. Activins are dimeric growth and differentiation factors belonging to the TGF-beta superfamily. Activins signal through a heteromeric complex of receptor serine kinases which include at least two type I? (I and IB) and two type I?I (II and IIB) receptors. Type I receptors are essential for signaling, and type I?I receptors are required for binding ligands and for expression of type I? receptors. On ligand binding, Type I and II receptors form a stable complex, resulting in phosphorylation of type I? receptors by type I?I receptors with constitutive kinase activity, and subsequently the initiates activation of downstream molecules. The activin A type I?IB receptor displays a 3- to 4-fold higher affinity for the ligand than the type I?I receptor. Mouse activin receptor IIB (ACVR2B) is a transmembrane proteins consisting of a ligand-binding extracellular domain with cysteine-rich region, a transmembrane segment, a cytoplasmic domain with predicted serine/threonine specificity, and as well as a C-terminal PDZ binding motif . Mouse ACVR2B shares 99% aa sequence identity with human and rat within ECD.

References

1. Hilden K. et al., 1994, Blood. 83: 2163-70.
2. Persson U. et al., 1997, J Biol Chem. 272: 21187-94.
3. Manova K. et al., 1995, Mech Dev. 49: 3-11.
4. Matzuk MM. et al., 1992, Biochem Biophys Res Commun.185: 404-13.