## Recombinant Human ACVR2B/ActivinR-IIB Protein (Fc Tag)





Note: Centrifuge before opening to ensure complete recovery of vial contents.

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Descri	

Synonyms Activin Receptor Type-2B;Activin Receptor Type IIB;ACTR-IIB;ACVR2B;Bone

Morphogenetic Protein Receptor Type-2;BMP Type-2 Receptor;BMPR-5;Bone

Morphogenetic Protein Receptor Type II;BMP Type II Receptor

Species Human

Expression Host HEK293 Cells
Sequence Met 1-Thr 134
Accession NP\_001097.2
Calculated Molecular Weight 40.0 kDa
Observed molecular weight 60-65 kDa
Tag C-hFc

**Bioactivity** 1. Measured by its ability to neutralize Activin-mediated inhibition on MPC11 cell

proliferation. The ED50 for this effect is typically 0.02-0.1 µg/mL in the presence

of 10 ng/mL recombinant Activin A.

2. Immobilized Inhibin Human, Mouse, Rat, Cynomolgus, Rhesus Inhibin beta A/Activin A at 2  $\mu$ g/ml (100  $\mu$ l/well) can bind Human ACVR2B hFc, the EC50 of

Human ACVR2B hFc is 12-60 ng/mL.

#### **Properties**

**Purity** > 97 % as determined by reducing SDS-PAGE.

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

**Storage** Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to

-80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots

of reconstituted samples are stable at < -20°C for 3 months.

**Shipping** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation** Lyophilized from sterile PBS, pH 7.4

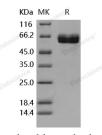
Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as

protectants before lyophilization.

Please refer to the specific buffer information in the printed manual.

**Reconstitution** Please refer to the printed manual for detailed information.

### Data



> 97 % as determined by reducing SDS-PAGE.

### Background

## For Research Use Only

A Reliable Research Partner in Life Science and Medicine

Toll-free: 1-888-852-8623 Tel: 1-832-243-6086 Fax: 1-832-243-6017

Web: www.elabscience.com Email: techsupport@elabscience.com

# Recombinant Human ACVR2B/ActivinR-IIB Protein (Fc Tag)

by Elabscience

Catalog Number:PKSH031743

ACVR2A and ACVR2B are two activin type II receptors. ACVR2B is integral to the activin and myostatin signaling pathway. Ligands such as activin and myostatin bind to ACVR2A and ACVR2B. Myostatin, a negative regulator of skeletal muscle growth, is regarded as a potential therapeutic target and binds to ACVR2B effectively, and to a lesser extent, to ACVR2A. The structure of human ACVR2B kinase domain in complex with adenine establishes the conserved bilobal architecture consistent with all other catalytic kinase domains. Haplotype structure at the ACVR2B and follistatin loci may contribute to interindividual variation in skeletal muscle mass and strength. Defects in ACVR2B are a cause of left-right axis malformations.

 Toll-free: 1-888-852-8623
 Tel: 1-832-243-6086
 Fax: 1-832-243-6017

 Web: <a href="mailto:www.elabscience.com">www.elabscience.com</a>
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