

## Recombinant Human ACVR1B Protein, C-His-tagged

## **Product Information**

**Cat** IMP-9176

Official Symbol ACVR1B

Product Overview Human ACVR1B recombinant protein with polyhistidine tag at the C-

terminus expressed in E. coli.

**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 a cysteine-rich region, a transmembrane domain, and a cytoplasmic domain with

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 IB receptor,

composed of 11 exons. Alternative splicing and alternative polyadenylation result in 3 fully described transcript variants. The mRNA expression of variants 1, 2, and 3 is confirmed, and a potential fourth variant contains an alternative exon 8 and lacks exons 9 through 11, but its mRNA expression

has not been confirmed.

Expression System E. coli

Species Human

Tag C-His

**Form** Lyophilized from a solution containing 1X PBS, pH 8.0. Reconstitute the

lyophilized powder in ddH2O to 100 µg/mL.

AA Sequence MGLECDGRTNLCCRQQFFIDFRLIGWNDWIIAPTGYYGNYCEGSCPAYLA

*GVPGSASSFHTAVVNQYRMRGLNPGTVNSCCIPTKLSTMSMLYFDDEYN* 

IVKRDVPNMIVEECGCA with polyhistidine tag at the C-terminus.

**Endotoxin** < 0.1 EU/μg of protein by the LAL method.

Purity > 98% by SDS-PAGE

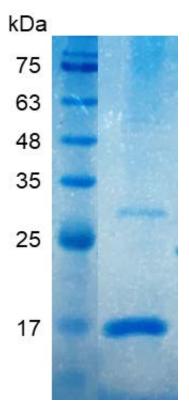
Applications Functional Study; SDS-PAGE

Storage Lyophilized protein should be stored at -20 centigrade. Protein aliquots

should be stored at-20 to -80 centigrade.

SDS-PAGE





SDS-PAGE Stained with Coomassie Blue. SDS-PAGE analysis of ACVR1B (Human) Recombinant Protein.

Bioactivity-ELISA 1



