

## PRODUCT INFORMATION

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|---|---|
| <b>Target</b>                           | ACVR2B  |
| <b>Synonyms</b>                         | HTX4; ACTRIIB; ActR-IIB   |
| <b>Description</b>                      | Recombinant human ACVR2B(19-137) Protein with C-terminal 10×His tag   |
| <b>Delivery</b>                         | In Stock  |
| <b>Uniprot ID</b>                       | Q13705  |
| <b>Expression Host</b>                  | HEK293  |
| <b>Tag</b>                              | C-10×His tag  |
| <b>Molecular Characterization</b>       | ACVR2B(Ser19-Thr137) 10×His tag   |
| <b>Molecular Weight</b>                 | The protein has a predicted molecular mass of 15.0 kDa after removal of the signal peptide.   |
| <b>Purity</b>                           | The purity of the protein is greater than 85% as determined by SDS-PAGE and Coomassie blue staining.  |
| <b>Formulation &amp; Reconstitution</b> | Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8% trehalose is added as protectants before lyophilization. Please see Certificate of Analysis for specific instructions of reconstitution.  |
| <b>Storage&amp;Shipping</b>             | Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.   |
| <b>Background</b>                       | 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. [provided by RefSeq, Jul 2008] |
| <b>Usage</b>                            | Research use only   |
| <b>Conjugate</b>                        | Unconjugated  |



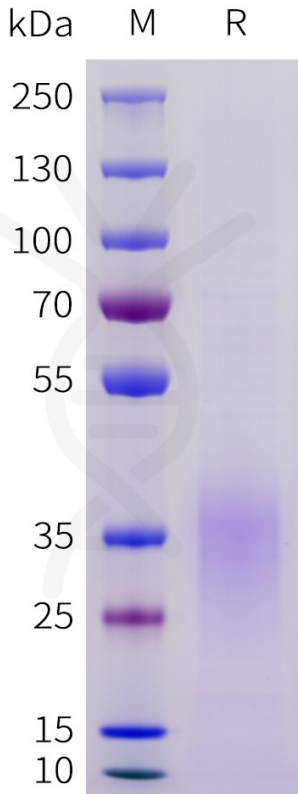


Figure 1. Human ACVR2B(19-137) Protein, His Tag on SDS-PAGE under reducing condition.

### Human ACVR2B(19-137), His Tagged Protein ELISA

0.2  $\mu$ g of Human ACVR2B(19-137), His tagged protein per well

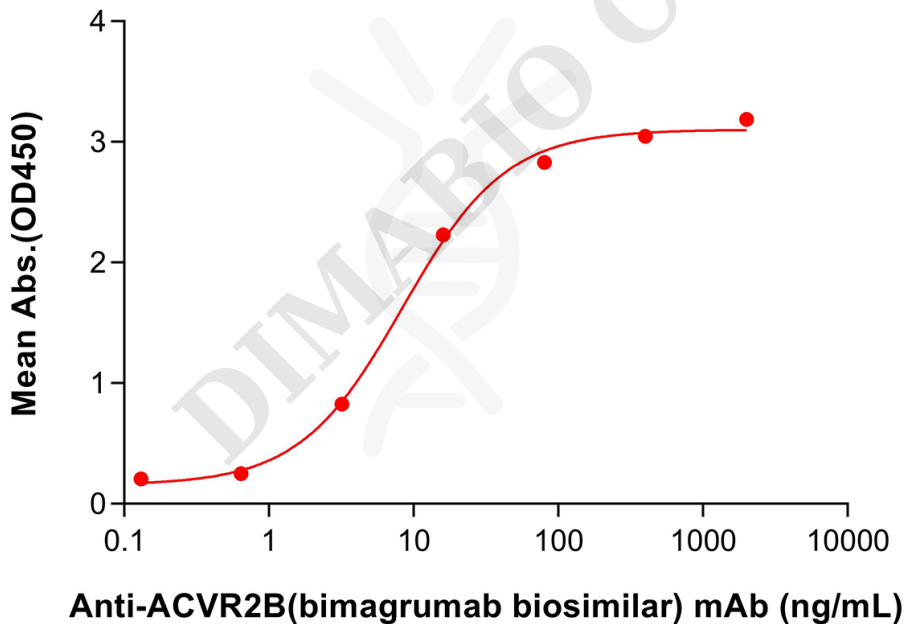


Figure 2. ELISA plate pre-coated by 2  $\mu$ g/mL (100  $\mu$ L/well) Human ACVR2B(19-137) Protein, His Tag (PME101717) can bind Anti-ACVR2B(bimagrumab biosimilar) mAb (BME100228) in a linear range of 3.2-16 ng/mL.

