



Recombinant Protein Technical Manual  
Recombinant Mouse ALK4/ACVR1B Protein (Fc Tag)  
RPES4720

Product Data:

**Product SKU:** RPES4720

**Size:** 10µg

**Species:** Mouse

**Expression host:** Human Cells

**Uniprot:** Q61271

Protein Information:

**Molecular Mass:** 37.7 kDa

**AP Molecular Mass:** 39-50 kDa

**Tag:** C-Fc

**Bio-activity:**

**Purity:** > 95 % as determined by SDS-PAGE

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

**Storage:** 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 a 0.2 µm filtered solution of PBS, pH7.4.

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

**Application:**

**Synonyms:** Activin Receptor TypeB; Activin Receptor Type IB; ACTR-IB; Activin Receptor-Like Kinase 4; ALK-4; Serine/Threonine-Protein Kinase Receptor R2; SKR2; ACVR1B; ACVRLK4; ALK4

## Immunogen Information:

**Sequence:** Leu32-Glu126

## Background:

Activin Receptor TypeB (ACVR1B) is a single-pass type I membrane protein that belongs to the protein kinase superfamily. ACVR1B contains one GS domain and one protein kinase domain and is expressed in many tissues, most strongly in kidney, pancreas, brain, lung, and liver. ACVR1B acts as a transducer of activin or activin like ligands signals. Activin binds to either ACVR2A or ACVR2B and then forms a complex with ACVR1B, ACVR2A or ACVR2B activating ACVR1B through phosphorylation of its regulatory GS domain. They go on to recruit the R-SMADs, SMAD2 and SMAD3. ACVR1B also transducers signals of nodal, GDF, and Vg1. Mutations in ACVR1B are associated with pituitary tumors.