# Rat ALK-1 / ACVRL1 (His & Fc Tag) recombinant protein

Catalog Number: 500285

## **General Information**

#### Gene Name Synonym

TGF-B superfamily receptor type I

#### **Protein Construction**

A synthetic DNA sequence encoding the rat ACVRL1 (NP\_071886.1) extracellular domain (Met 1-Ala 118) was fused with the C-terminal polyhistidine-tagged Fc region of human IgG1 at the C-terminus.

#### Organism

Rat

#### **Expression Host**

Human Cells

## **QC Testing**

#### Activity

Measured by its ability to inhibit BMP9 induced alkaline phosphatase production by MC3T3E1 mouse chondrogenic cells. David, L. et al. (2007) Blood 109:1953.

The  $ED_{50}$  for this effect is typically 40-200 ng/mL in the presence of 2 ng/mL of recombiant human BMP9.

#### Purity

> 90 % as determined by SDS-PAGE

#### Endotoxin

< 1.0 EU per  $\mu g$  of the protein as determined by the LAL method

#### Stability

Samples are stable for up to twelve months from date of receipt at -70  $^{\circ}\mathrm{C}$ 

#### **Predicted N terminal**

#### Asp 17

#### **Molecular Mass**

The secreted recombinant rat ACVRL1/Fc is a disulfide-linked homodimer after removal of the signal peptide. The reduced monomer comprises 343 amino acids with a predicted molecular mass of 38.7 kDa. As a result of glycosylation, it migrates as an approximately 50-55 kDa band in SDS-PAGE under reducing conditions.

#### Formulation

Lyophilized from sterile PBS, pH 7.4 1.5 % trehalose and mannitol are added as protectants before lyophilization. 2. Please contact us for any concerns or special requirements.

### **Usage Guide**

#### Storage

Store it under sterile conditions at -20°C to -80°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

#### Reconstitution

Adding sterile water, prepare a stock solution of 0.25 mg/ml. Concentration is measured by UV-Vis.

#### **SDS-PAGE**

116	-		
66.2	-	2	2
45.0	-	1	7
35.0	-		
25.0	-		
18.4	-		
14.4	-		

Rat ALK-1 / ACVRL1 Protein (His & Fc Tag) SDS-



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