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 μg 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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