

# Human ALK-1 / ACVRL1 (Fc Tag) recombinant protein



Catalog Number: 501915

## General Information

### Gene Name Synonym

Activin receptor-like kinase 1; TGF-B superfamily receptor type I

### Protein Construction

A DNA sequence encoding the N-terminal segment (Met 1-Gln 118) of the extracellular domain of human ALK1 (NP\_000011.2) pro-protein was fused with the Fc region of human IgG1 at the C-terminus.

### Organism

Human

### Expression Host

Human Cells

## QC Testing

### Activity

1. Measured by its ability to bind Human ENG-Fc (Cat:504243) in functional Elisa.
2. Measured by its ability to latent TGFB1-His (Cat:503624) in functional Elisa.
3. Measured by its ability to mouse ENG-His (Cat:502127) in functional Elisa.
4. 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<sub>50</sub> for this effect is typically 5-15 ng/mL in the presence of 2 ng/mL of recombinant human BMP9.

### Purity

> 97 % 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°C

### Predicted N terminal

Asp 22

### Molecular Mass

The mature recombinant human ALK1/Fc chimera is a disulfide-linked homodimeric protein. The reduced monomer comprises 335 amino acids and has a predicted molecular mass of 37.4 kDa. As a result of glycosylation, the recombinant monomer migrates as an approximately 45-50 kDa protein 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.

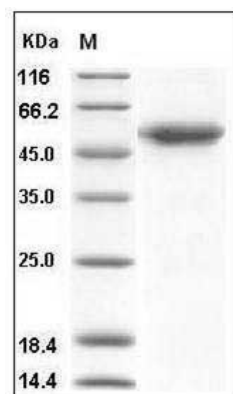
### SDS-PAGE

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Human ALK-1 / ACVRL1 Protein (Fc Tag) SDS-PAGE