

# Rat ALK-7/Activin RIC Protein

Cat. No. ALK-RM207

## Description

<b>Source</b>	Recombinant Rat ALK-7/Activin RIC Protein is expressed from HEK293 with hFc (IgG1) tag at the C-terminus. It contains Leu26-Glu113.
<b>Accession</b>	P70539
<b>Molecular Weight</b>	The protein has a predicted MW of 35.46 kDa. Due to glycosylation, the protein migrates to 48-68 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 0.1 EU per $\mu\text{g}$ by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 90% as determined by HPLC

## Formulation and Storage

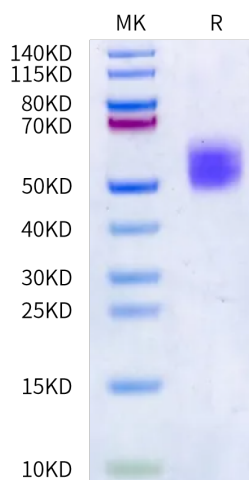
<b>Formulation</b>	Lyophilized from 0.22 $\mu\text{m}$ filtered solution in 20mM Tris, 150mM NaCl (pH 7.5). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

Arterial stiffness is an important feature of diabetic macrovascular complications. Activin receptor-like kinase 7 (ALK7), a member of type I transforming growth factor- $\beta$  (TGF- $\beta$ ) receptors, is correlated with pathogenic risks of type 2 diabetes mellitus and cardiovascular diseases and may be involved in cardiovascular remodeling.

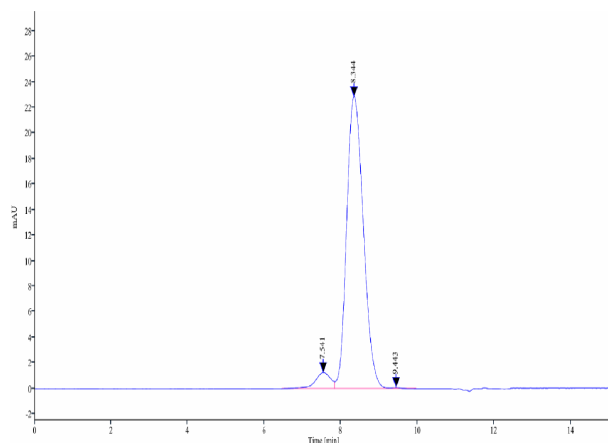
## Assay Data

### Bis-Tris PAGE



Rat ALK-7 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC



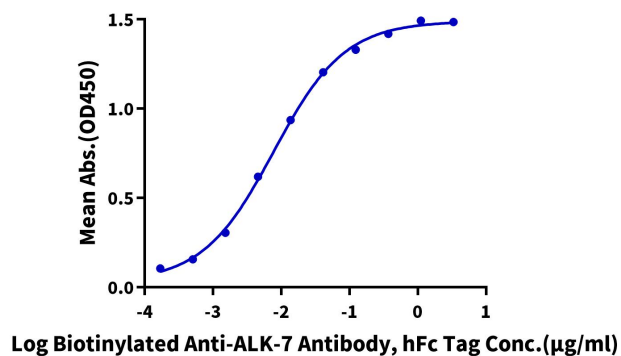
The purity of Rat ALK-7 is greater than 90% as determined by SEC-HPLC.

Assay Data

ELISA Data

**Rat ALK-7, hFc Tag ELISA**

0.5µg Rat ALK-7, hFc Tag Per Well



Immobilized Rat ALK-7, hFc Tag at 5µg/ml (100µl/well) on the plate. Dose response curve for Biotinylated Anti-ALK-7 Antibody, hFc Tag with the EC50 of 7.8ng/ml determined by ELISA.