

Human ALK-7/Activin RIC Protein, Ultra Low Endotoxin



Cat. No. ALK-HM107-UL

Description

Source	Recombinant Human ALK-7/Activin RIC Protein is expressed from HEK293 with His tag at the C-terminus. It contains Glu21-Glu113.
Accession	Q8NER5-1
Molecular Weight	The protein has a predicted MW of 11.11 kDa. Due to glycosylation, the protein migrates to 20-40 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 0.01 EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

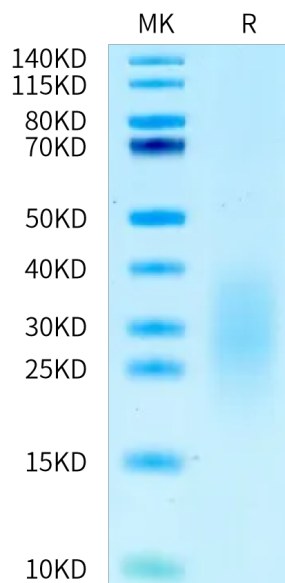
Formulation	Lyophilized from 0.22 µm filtered solution in 20mM Tris, 150mM NaCl (pH 7.5). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-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- β (TGF- β) receptors, is correlated with pathogenic risks of type 2 diabetes mellitus and cardiovascular diseases and may be involved in cardiovascular remodeling.

Assay Data

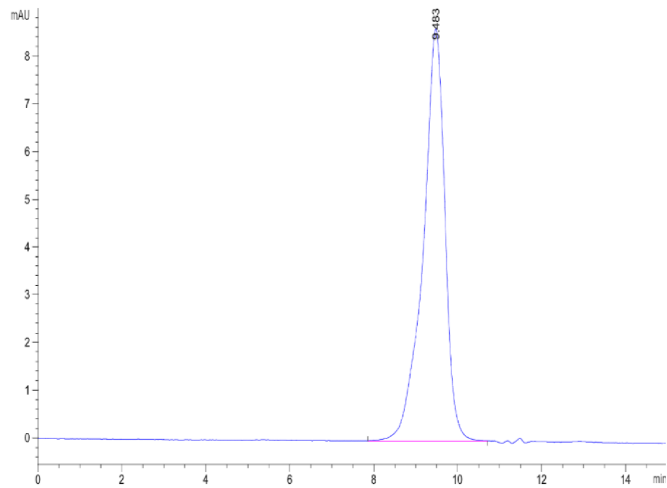
Bis-Tris PAGE



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

SEC-HPLC

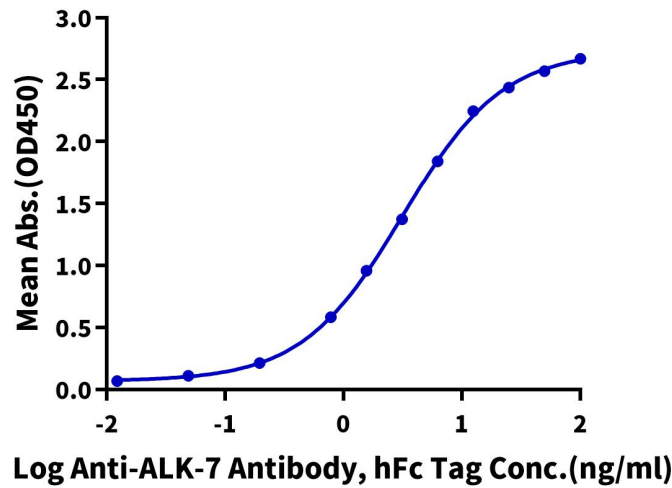
Assay Data



The purity of Human ALK-7 is greater than 95% as determined by SEC-HPLC.

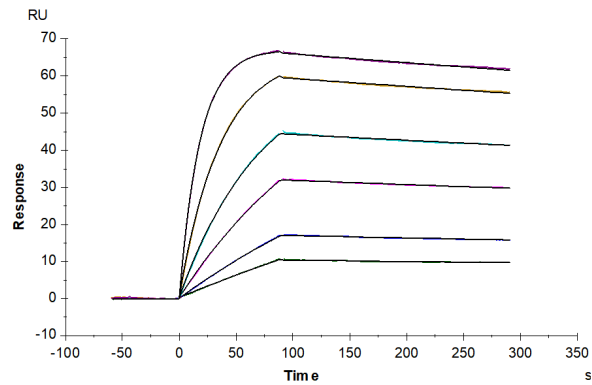
ELISA Data

Human ALK-7, His Tag ELISA
0.05µg Human ALK-7, His Tag Per Well



Immobilized Human ALK-7, His Tag at 0.5µg/ml (100µl/well) on the plate. Dose response curve for Anti-ALK-7 Antibody, hFc Tag with the EC50 of 3.15ng/ml determined by ELISA (QC Test).

SPR Data



Anti-ALK-7 Antibody, hFc Tag captured on CM5 Chip via Protein A can bind Human ALK-7, His Tag with an affinity constant of 0.67 nM as determined in SPR assay (Biacore T200).