

Human ACVR1/ALK-2 Protein

Cat. No. ALK-HM202

Description

Source	Recombinant Human ACVR1/ALK-2 Protein is expressed from HEK293 with hFc tag at the C-terminus. It contains Met21-Glu123.
Accession	Q04771
Molecular Weight	The protein has a predicted MW of 37.43 kDa. Due to glycosylation, the protein migrates to 45-55 kDa based on Tris-Bis PAGE result.
Endotoxin	Less than 1EU per μg by the LAL method.
Purity	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

Formulation and Storage

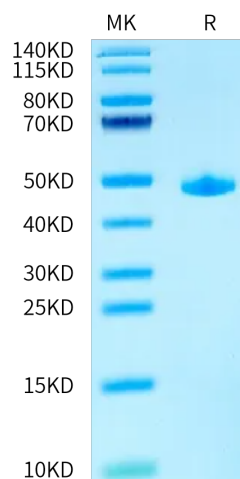
Formulation	Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3-6 months after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

Activin A receptor type I (ACVR1), a transmembrane serine/threonine kinase, belongs to the transforming growth factor- β superfamily, which signals via phosphorylating the downstream effectors and SMAD transcription factors. Genetic variation in ACVR1 has been associated with a rare disease, fibrodysplasia ossificans progressive, and its somatic alteration is reported in rare cancer diffuse intrinsic pontine glioma.

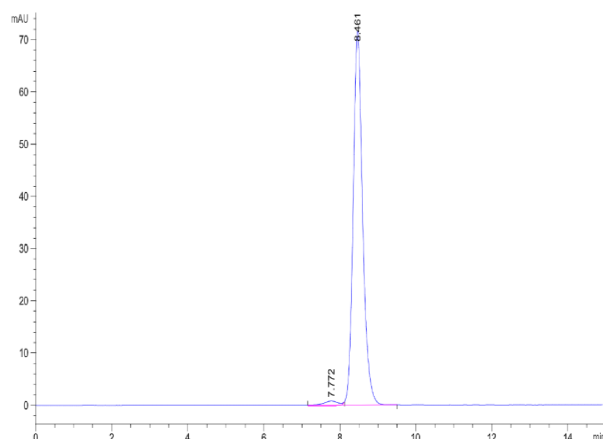
Assay Data

Tris-Bis PAGE



Human ACVR1 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC



The purity of Human ACVR1 is greater than 95% as determined by SEC-HPLC.