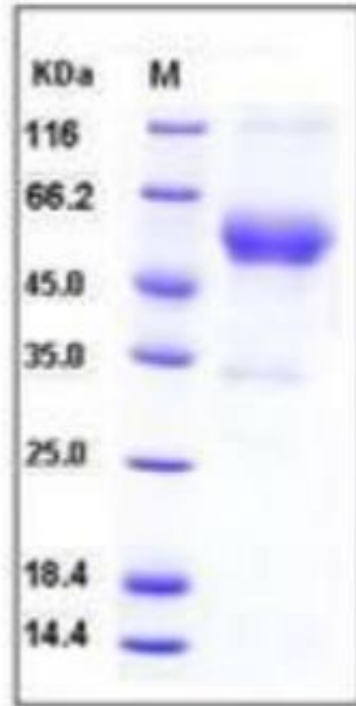


Recombinant Mouse Acvr1 Protein, C-His&C-hFc-tagged

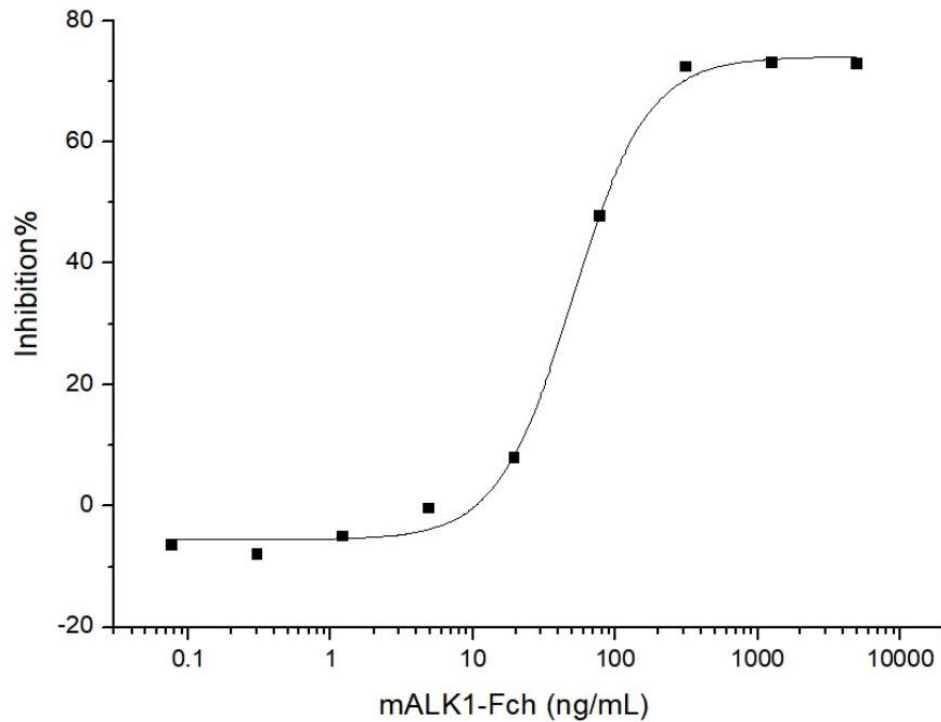
Product Information

Cat	IMP-1798
Official Symbol	Acvr1
Product Overview	Recombinant mouse ALK1 (NP_033742.2) precursor (Met 1-Pro 119) was fused with the C-terminal polyhistidine-tagged Fc region of human IgG1 at the C-terminus.
Description	Activin A receptor, type II-like 1 (ACVRL1), also known as ALK-1 (activin receptor-like kinase 1), is an endothelial-specific type I receptor of the TGF-beta (transforming growth factor beta) receptor family of ligands. On ligand binding, a heteromeric receptor complex forms consisting of two type II and two type I transmembrane serine/threonine kinases. ACVRL1 protein is expressed in certain blood vessels of kidney, spleen, heart and intestine, serving as an important role during vascular development. Mutations in ACVRL1 gene are associated with hemorrhagic telangiectasia type 2, also known as Rendu-Osler-Weber syndrome 2 and vascular disease.
Expression System	HEK293
Species	Mouse
Tag	C-His&C-hFc
Predicted N Terminal	Asp 23
Form	Lyophilized from sterile PBS, pH 7.4, 5 % trehalose, 5% mannitol and 0.01% Tween80.
Molecular Mass	The secreted recombinant mouse ALK1/Fc is a disulfide-linked homodimer after removal of the signal peptide. The reduced monomer comprises 345 amino acids with a predicted molecular mass of 39 kDa. As a result of glycosylation, it migrates as an approximately 50-55 kDa band in SDS-PAGE under reducing conditions.
Protein length	Met1-Pro119
Endotoxin	< 1.0 EU/μg of the protein as determined by the LAL method
Purity	> 95 % as determined by SDS-PAGE
Storage	Samples are stable for up to twelve months from date of receipt at -20 to -80 centigrade. Store it under sterile conditions at -20 to -80 centigrade. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Reconstitution	A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.

SDS-PAGE



Bioactivity-Cell based assay 1



Measured by its ability to inhibit BMP9-induced alkaline phosphatase production by MC3T3E1 mouse chondrogenic cells. The ED50 for this effect is typically 60-300 ng/mL in the presence of 2 ng/mL of recombinant human BMP9.