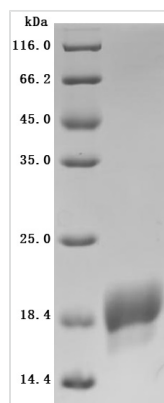


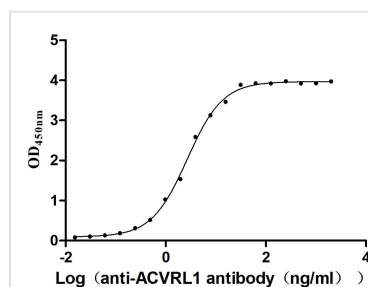


Recombinant Human Serine/threonine-protein kinase receptor R3 (ACVRL1), partial (Active)

Product Code	CSB-BP001262HU1
Abbreviation	Recombinant Human ACVRL1 protein, partial (Active)
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P37023
Form	Lyophilized powder
Storage Buffer	Lyophilized from a 0.2 µm filtered 20 mM Tris-HCl, 0.5 M NaCl, 6% Trehalose, pH 8.0
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Biological Activity	Measured by its binding ability in a functional ELISA. Immobilized Human ACVRL1 at 2 µg/mL can bind Anti-ACVRL1 recombinant antibody(CSB-RA001262MA1HU), the EC50 is 2.417-2.971 ng/mL.
Purity	Greater than 95% as determined by SDS-PAGE.
Sequence	DPVKPSRGPLVTCTCESPHCKGPTCRGAWCTVVLVREEGRHPQEHRGCGNL HRELCRGRPTFEVNHYYCCDSHLCNHNVS LVLEATQPPSEQPGTDGQ
Source	Baculovirus
Target Names	ACVRL1
Expression Region	22-118aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	C-terminal 6xHis-tagged
Mol. Weight	11.5KDa
Protein Length	Partial
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.



Activity

Measured by its binding ability in a functional ELISA. Immobilized Human ACVRL1 at 2 μ g/mL can bind Anti-ACVRL1 recombinant antibody (CSB-RA001262MA1HU)?the EC₅₀ is 2.417-2.971 ng/mL.

Description

The recombinant human serine/threonine-protein kinase receptor R3 (ACVRL1) is an active protein generated in the baculovirus-infected insect cell expression system. The gene fragment encoding the 22-118aa of the human ACVRL1 protein was fused with the 6xHis-tag gene at the C-terminus and then cloned into the baculovirus transfer vector. The resulting ACVRL1 gene-containing vector was co-transfected into the cells with the baculovirus packaging mix to obtain the ACVRL1 gene-containing recombinant virus particles. Insect cells were infected with the recombinant bacmid, and transfected insect cells were selected through antibiotic screening and then cultured to harvest the recombinant human ACVRL1 protein. The purity of this protein is over 95% measured by SDS-PAGE. It contains low endotoxin, less than 1.0 EU/ug determined by the LAL method. Its activity was validated through a functional ELISA. Immobilized human CVRL1 at 2 μ g/mL can bind the anti-ACVRL1 recombinant antibody (CSB-RA001262MA1HU), with the EC₅₀ of 2.417-2.971 ng/mL.

ACVRL1, the endothelial cell-specific type I receptor of the TGF- β superfamily, is primarily expressed in vascular endothelial cells and plays a crucial role in the regulation of normal vascular development and remodeling, as well as pathological tumor angiogenesis. ACVRL1 controls a series of genes related to cancer cell survival, proliferation, angiogenesis, invasion, and metastasis, exerting a significant role in inhibiting the expression of key immune activation regulators and promoting the production of immune suppression factors. Therefore, targeting the ACVRL1 signaling pathway has become a promising strategy for anti-angiogenic cancer therapy. Developing active ACVRL1 proteins is of great significance in further studying its function and developing tumor drugs.



Endotoxin	Less than 1.0 EU/ug as determined by LAL method.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.
Shelf Life	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.