

For Research Use Only

ACVRL1 Recombinant antibody, PBS Only (Capture/Detector)

Catalog Number: 84421-1-PBS



Basic Information

Catalog Number: 84421-1-PBS	GenBank Accession Number: BC042637	Purification Method: Protein A purification
Size: 100ug, Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 94	CloneNo.: 241686B9
Source: Rabbit	UNIPROT ID: P37023	
Isotype: IgG	Full Name: activin A receptor type II-like 1	
	Calculated MW: 56 kDa	

Applications

Tested Applications:
IF/ICC, Cytometric bead array, Sandwich ELISA, Indirect ELISA, Sample test

Species Specificity:
human

Product Information

84421-1-PBS targets ACVRL1 as part of a matched antibody pair:

MP01306-1: 84421-2-PBS capture and 84421-1-PBS detection (validated in Cytometric bead array)

MP01306-2: 84421-1-PBS capture and 84421-2-PBS detection (validated in Sandwich ELISA)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

Background Information

ACVRL1 (also known as ALK1) is a type I cell-surface receptor for the TGF-beta superfamily of ligands. It shares with other type I receptors a high degree of similarity in serine-threonine kinase subdomains, a glycine- and serine-rich region (called the GS domain) preceding the kinase domain, and a short C-terminal tail. ACVRL1 is highly expressed in endothelial cells and has a critical role in the control of blood vessel development and repair (PMID: 8640225). Mutations in the ACVRL1 gene are associated with hemorrhagic telangiectasia type 2.

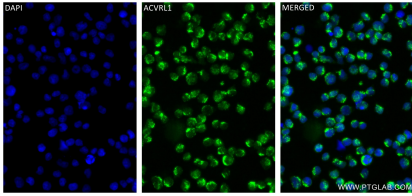
Storage

Storage:
Store at -80°C.
Storage Buffer:
PBS Only

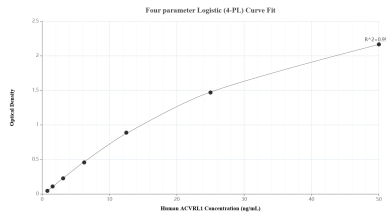
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

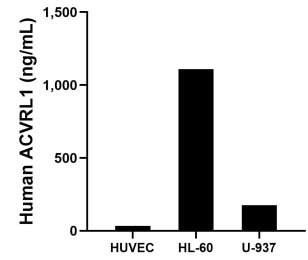
Selected Validation Data



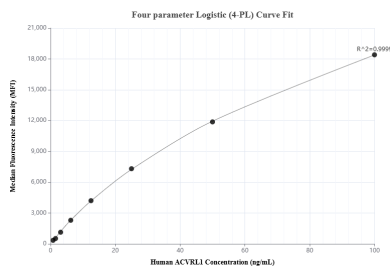
Immunofluorescent analysis of (4% PFA) fixed Jurkat cells using ACVRL1 antibody (84421-1-RR, Clone: 241686B9) at dilution of 1:250 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 84421-1-PBS in a different storage buffer formulation.



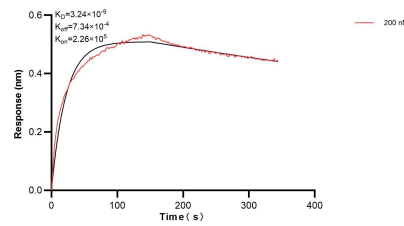
Sandwich ELISA standard curve of MP01306-2, Human ACVRL1 Recombinant Matched Antibody Pair - PBS only. 84421-1-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Eg2132. 84421-2-PBS was HRP conjugated as the detection antibody. Range: 0.781-50 ng/mL.



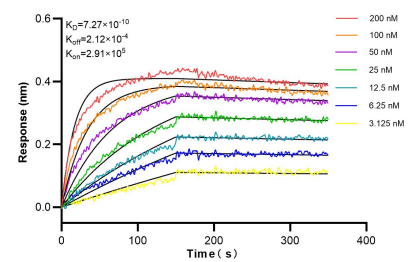
The mean ACVRL1 concentration was determined to be 34.48 ng/mL in HUVEC cell extract based on a 0.91 mg/mL extract load, 1108.74 ng/mL in HL-60 cell extract based on a 3.00 mg/mL extract load and 176.59 ng/mL in U-937 cell extract based on a 1.40 mg/mL extract load.



Cytometric bead array standard curve of MP01306-1, ACVRL1 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84421-2-PBS. Detection antibody: 84421-1-PBS. Standard: Eg2132. Range: 0.781-100 ng/mL.



Biolyser interferometry (BLI) kinetic assay of 84421-1-PBS against Human ACVRL1 was performed. The affinity constant is 3.24 nM.



Biolyser interferometry (BLI) kinetic assays of 84421-1-RR against Human ACVRL1 were performed. The affinity constant is 0.727 nM.