

For Research Use Only

PCSK9 Recombinant antibody, PBS Only (Capture)

Catalog Number: 84172-4-PBS



Basic Information

Catalog Number: 84172-4-PBS	GenBank Accession Number: NM_174936.4	Purification Method: Protein A purification
Size: 100ug, Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 255738	CloneNo.: 241395G1
Source: Rabbit	UNIPROT ID: Q8NBP7	
Isotype: IgG	Full Name: proprotein convertase subtilisin/kexin type 9	
	Calculated MW: 74 kDa	
	Observed MW: 72-78 kDa, 62 kDa	

Applications

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

Species Specificity:
human

Product Information

84172-4-PBS targets PCSK9 as part of a matched antibody pair.

MP01071-3: 84172-4-PBS capture and 84172-3-PBS detection (validated in Cytometric bead array)

MP01071-4: 84172-4-PBS capture and 84172-6-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

Proprotein convertase subtilisin/kexin type 9 (PCSK9) is a crucial protein governing the circulating levels of low density lipoprotein-cholesterol (LDL-C), by virtue of its pivotal role in the degradation of the LDL receptor (LDLR). PCSK9 is expressed in the kidney and lung. It is synthesized as a 72 kDa immature precursor that undergoes autocatalytic cleavage in the endoplasmic reticulum to generate a 63 kDa mature protein. The cleaved N-terminal fragment remains associated with the mature protein and is necessary for its secretion, allowing it to circulate in the blood. The ability of PCSK9 to regulate a diverse group of cell-surface proteins hinted that it might also be able to influence additional membrane proteins that are important in anti-tumour immune responses. Targeting PCSK9 to treat cancer is also attractive because two neutralizing antibodies against it, evolocumab and alirocumab, have already been approved for human clinical use to lower cholesterol levels. (PMID: 30522786, PMID: 22493497)

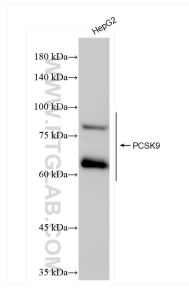
Storage

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

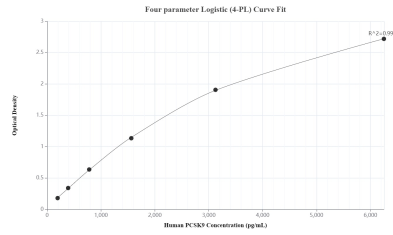
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

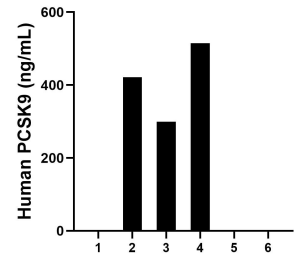
Selected Validation Data



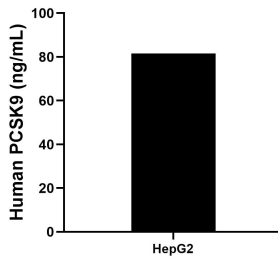
HepG2 cells were subjected to SDS PAGE followed by western blot with 84172-4-RR (PCSK9 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84172-4-PBS in a different storage buffer formulation.



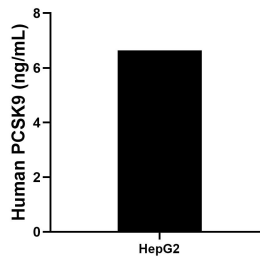
Sandwich ELISA standard curve of MP01071-4, Human PCSK9 Recombinant Matched Antibody Pair - PBS only. 84172-4-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Eg0362. 84172-6-PBS was HRP conjugated as the detection antibody. Range: 195-6250 pg/mL.



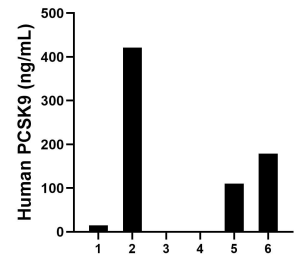
Plasma of six individual healthy human donors was measured. The PCSK9 concentration of detected samples was determined to be 206.0 ng/mL with a range of ND-514.5 ng/mL.



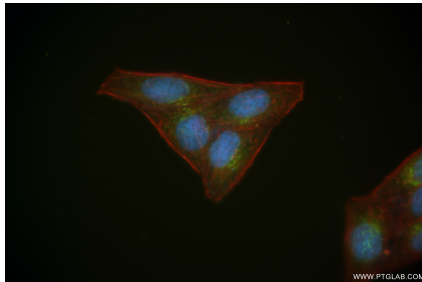
HepG2 were cultured in DMEM supplemented with 10% fetal bovine serum, 2.5 mM L-glutamine, 100 U/mL penicillin, and 100 µg/mL streptomycin sulfate. An aliquot of the cell culture supernate was removed, assayed for human PCSK9, and measured 81.6 ng/mL.



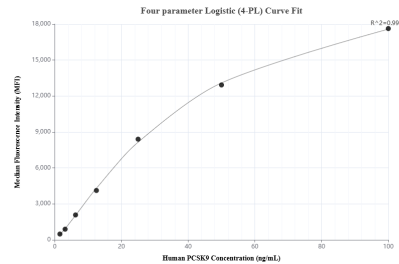
The mean PCSK9 concentration was determined to be 6.6 ng/mL in HepG2 cell extract based on a 2.0 mg/mL extract load.



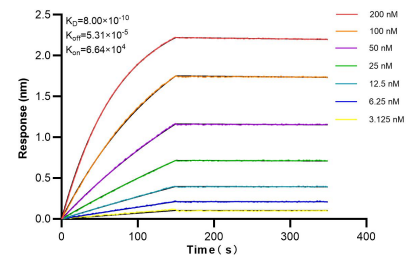
Serum of six individual healthy human donors was measured. The PCSK9 concentration of detected samples was determined to be 120.8 ng/mL with a range of ND-421.1 ng/mL.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using PCSK9 antibody (84172-4-RR, Clone: 241395G1) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red). This data was developed using the same antibody clone with 84172-4-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP01071-3, PCSK9 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84172-4-PBS. Detection antibody: 84172-3-PBS. Standard: Eg0362. Range: 1.563-100 ng/mL.



Bi-layer interferometry (BLI) kinetic assays of 84172-4-RR against Human PCSK9 were performed. The affinity constant is 0.80 nM.