

JOT0121-1: Anti-PCSK9 VHH antibody

Clonality : Monoclonal
Application : ELISA,IHC
Reactivity : Human
Isotype : Camelid VHH

Description

Alpaca derived anti-PCSK9 VHH single domain antibody (molecular weight: 14.8 kDa) with a 6*His tag at its C-terminal, expressed in E. coli under conditions free from animal derived components.

Proprotein convertase subtilisin/kexin type 9 (PCSK9), also known as NARC1 (neural apoptosis regulated convertase), which is a newly identified human secretory subtilase belonging to the proteinase K subfamily of the secretory subtilase family. PCSK9 protein is an enzyme which in humans is encoded by the PCSK9 gene with orthologs found across many species. It is expressed in neuroepithelioma, colon carcinoma, hepatic and pancreatic cell lines, and in Schwann cells. PCSK9 protein is highly expressed in the liver and regulates low density lipoprotein receptor (LDLR) protein levels. Inhibition of PCSK9 protein function is currently being explored as a means of lowering cholesterol levels. Thereby, PCSK9 protein is regarded as a new strategy to treat hypercholesterolemia. PCSK9 protein contributes to cholesterol homeostasis and may have a role in the differentiation of cortical neurons.

This is a product from [Jotbody](#), Hong Kong. This antibody is made available worldwide by ABEOMICS Inc.

Product Info

Amount : 100 µg / 50 µg
Purification : Affinity chromatography purified via Ni-charged resin. Purity : > 95% as determined by SDS-PAGE
Content : 1 mg/mL by Nanodrop
Buffer : 25 mM TAPS pH8.5, 500 mM NaCl, 5 mM EDTA, 0.1 % Proclin 300
Storage condition : 4°C; Do not freeze.

Application Note

Positive controls : Positive ELISA detected in: recombinant human proprotein convertase subtilisin/kexin type 9 (PCSK9) protein

Positive IHC detected in: human hepatoma tissue Positive IF detected in: HepG2 cells.

Recommended dilutions ELISA 1:3000-1:10000 WB 1:1000-1:5000 IHC 1:200-1:600 IF 1:200-1:600

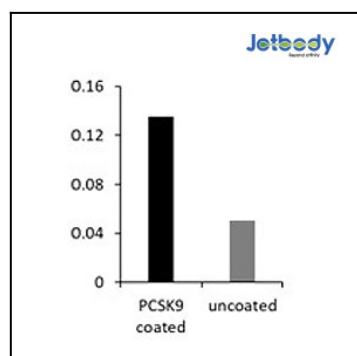


Figure 1: Immobilized recombinant Human Proprotein Convertase Subtilisin/Kexin Type 9 (PCSK9) protein at 1 µg/mL (100 µL/well) can bind anti-PCSK9 VHH antibody (JOT0121-1).

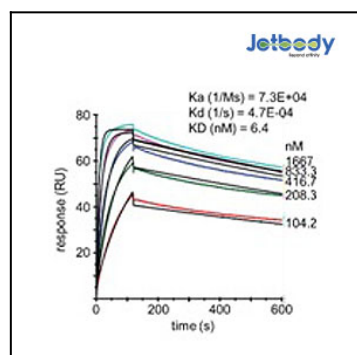


Figure 2: Captured recombinant Human Proprotein Convertase Subtilisin/Kexin Type 9 (PCSK9) protein on CM5 Chip can bind anti-PCSK9 VHH antibody (JOT0121-1) with an affinity constant of 6.4 nM as determined in SPR assay (Biacore T200).

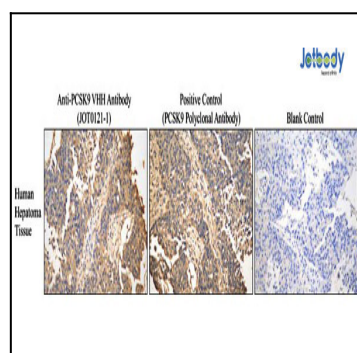


Figure 3: Immunohistochemical analysis of paraffin-embedded human hepatoma tissue slides using anti-PCSK9 VHH antibody (JOT0121-1) at 2.5 µg/ml and positive control (PCSK9 polyclonal antibody, a competitor product) at 1:200 dilution (under 20x lens), respectively. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

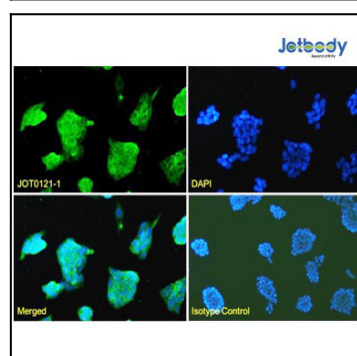


Figure 4: Immunofluorescence analysis of paraformaldehyde fixed HepG2 cells stained with anti-PCSK9 VHH antibody (JOT0121-1) at 2.5 µg/ml followed by CoraLite® 488 secondary antibody at 1:200 dilution, showing cytoplasmic staining (under 40x lens). The nuclear stain is DAPI (blue). The isotype control was stained with anti-unknown antibody followed by CoraLite® 488 secondary antibody (under 20x lens).