abcam

Product datasheet

Recombinant human LDL Receptor protein (Active) ab220570

1 References 3 Images

Description

Product name Recombinant human LDL Receptor protein (Active)

Biological activity Immobilized Human PCSK9, His Tag at 5μg/mL (100 μL/well) can bind ab220570 with a linear

range of 8-320 ng/mL.

Purity > 90 % SDS-PAGE.

Endotoxin level < 1.000 Eu/µl
Expression system HEK 293 cells

Accession P01130

Protein length Protein fragment

Animal free No

Nature Recombinant

Species Human

Sequence ERNEFQCQDGKCISYKWVCDGSAECQDGSDESQETCLS

VTCKSGDFSCGG

RVNRCIPQFWRCDGQVDCDNGSDEQGCPPKTCSQDEF

RCHDGKCISRQFV

CDSDRDCLDGSDEASCPVLTCGPASFQCNSSTCIPQLW

ACDNDPDCEDGS

DEWPQRCRGLYVFQGDSSPCSAFEFHCLSGECIHSSWR

CDGGPDCKDKSD

EENCAVATCRPDEFQCSDGNCIHGSRQCDREYDCKDMS

DEVGCVNVTLCE

GPNKFKCHSGECITLDKVCNMARDCRDWSDEPIKECGTN

ECLDNNGGCSH

VCNDLKIGYECLCPDGFQLVAQRRCEDIDECQDPDTCSQ

LCVNLEGGYKC

QCEEGFQLDPHTKACKAVGSIAYLFFTNRHEVRKMTLDRS

EYTSLIPNLR

NVVALDTEVASNRIYWSDLSQRMICSTQLDRAHGVSSYDT

VISRDIQAPD

GLAVDWIHSNIYWTDSVLGTVSVADTKGVKRKTLFRENGS

KPRAIVVDPV

1

HGFMYWTDWGTPAKIKKGGLNGVDIYSLVTENIQWPNGITL

DLLSGRLYW

VDSKLHSISSIDVNGGNRKTILEDEKRLAHPFSLAVFEDKV

FWTDIINEA

IFSANRLTGSDVNLLAENLLSPEDMVLFHNLTQPRGVNWC

ERTTLSNGGC

QYLCLPAPQINPHSPKFTCACPDGMLLARDMRSCLTEAE

AAVATQETSTV

RLKVSSTAVRTQHTTTRPVPDTSRLPGATPGLTTVEIVTMS

HQALGDVAG R

Predicted molecular weight 111 kDa

Amino acids 22 to 788

Additional sequence information extracellular domain with Fc fragment of human lgG1 at the C-terminus. Accession # NP_000518.

Specifications

Our Abpromise guarantee covers the use of ab220570 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications Functional Studies

SDS-PAGE

Form Lyophilized

Preparation and Storage

Stability and Storage Shipped at 4°C. Store at -80°C. Avoid freeze / thaw cycle.

pH: 7.4

Constituents: 0.61% Tris, 0.75% Glycine, 5% Trehalose, 0.44% L-Arginine, 0.87% Sodium

chloride

Lyophilized from 0.22 µm filtered solution.

5-10% trehalose is commonly used for freeze drying, and after reconstitution, the trehalose is

mostly about 3-5%

This product is an active protein and may elicit a biological response in vivo, handle with caution.

Reconstitution Reconstitute with sterile deionized water to a concentration of 100 μg/ml.

General Info

Function Binds LDL, the major cholesterol-carrying lipoprotein of plasma, and transports it into cells by

endocytosis. In order to be internalized, the receptor-ligand complexes must first cluster into clathrin-coated pits. In case of HIV-1 infection, functions as a receptor for extracellular Tat in

neurons, mediating its internalization in uninfected cells.

Involvement in disease Defects in LDLR are the cause of familial hypercholesterolemia (FH) [MIM:143890]; a common

autosomal semi-dominant disease that affects about 1 in 500 individuals. The receptor defect impairs the catabolism of LDL, and the resultant elevation in plasma LDL-cholesterol promotes deposition of cholesterol in the skin (xanthelasma), tendons (xanthomas), and coronary arteries

(atherosclerosis).

Sequence similarities Belongs to the LDLR family.

Contains 3 EGF-like domains.

Contains 7 LDL-receptor class A domains. Contains 6 LDL-receptor class B repeats.

Post-translational

N- and O-glycosylated.

modifications

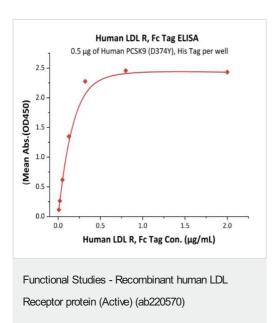
Ubiquitinated by MYLIP leading to degradation.

Cellular localization

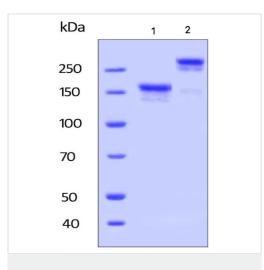
Cell membrane. Endomembrane system. Membrane > clathrin-coated pit. Found distributed from

the plasma membrane to intracellular compartments.

Images

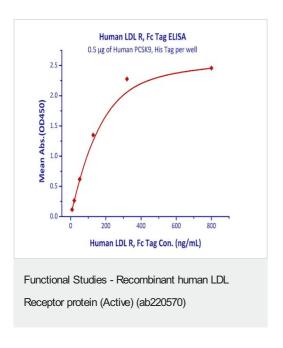


Immobilized Human PCSK9 (D374Y) (His Tag) at $5\mu g/mL$ (100 $\mu L/well$) can bind Human LDL R (Fc Tag) with a linear range of 8-320 ng/mL (QC tested).



SDS-PAGE - Recombinant human LDL Receptor protein (Active) (ab220570)

ab220570 on SDS-PAGE under reducing (lane 1) and no-reducing (lane 2) conditions. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%. As a result of glycosylation, the reduced protein migrates at 155-175 kDa and the non-reduced protein migrates at 310-350 kDa.



Example of ab220570 bioactivity.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- · Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

· Guarantee only valid for products bought direct from Abcam or one of our authorized distributors