

Anti-PCSK9 [508.20.33b (Fab33)] Standard Size Ab02938-23.0

This chimeric rabbit antibody was made using the variable domain sequences of the original Human IgG1 format for improved compatibility with existing reagents assays and techniques.

Isotype and Format: Rabbit IgG, Kappa

Clone Number: 508.20.33b (Fab33)

Alternative Name(s) of Target: NARC1; NARC-1; PC9; Proprotein convertase subtilisin/kexin type; Neural apoptosis-regulated convertase 1; Proprotein convertase 9; Subtilisin/kexin-like protease PC9

UniProt Accession Number of Target Protein: Q8NBP7

Published Application(s): antagonist, functional assay, therapeutic, Block, ELISA

Published Species Reactivity: cynomolgus monkeys, Rat, Human, Rhesus Monkey, Mouse

Immunogen: The original antibody was isolated from a phage display library by panning against biotinylated human PCSK9.

Specificity: This antibody binds human PCSK9. Proprotein convertase subtilisin/kexin type 9 (PCSK9) is a serine protease enzyme encoded by the PCSK9 gene in humans and it plays a role in regulation of circulating cholesterol. It is associated with autosomal dominant hypercholesterolemia, a state of elevated levels of LDL (low-density lipoprotein) cholesterol. Autosomal dominant hypercholesterolemia can result in severe implications such as stroke and coronary heart disease.

Application Notes: The binding affinity of this antibody towards PCSK9 protein from human, murine, rhesus, and cynomolgus monkey was done using surface plasmon resonance. This antibody was found to inhibit binding of PCSK9 to LDLR in a competition binding ELISA. This antibody plays a role in effective prevention of LDLR downregulation in HepG2 cells in vitro. When administered in vivo, this antibody prevented LDLR downregulation in mouse liver. This antibody showed a reduction in total serum cholesterol levels in mice when a single dose of 10 mg/kg was administered. It was also found that a combination of this antibody and statin results in a greater reduction in total cholesterol level compared to anti-PCSK9 antibody alone or statin alone treatments (US9266961). A randomized, double-blind, placebo-controlled, single and multiple dose study was conducted to evaluate, primarily, the safety and tolerability of single and multiple (four weekly) doses of reformatted IgG1 version of this antibody when administered by subcutaneous (SC) injection to healthy volunteers with elevated serum low-density lipoprotein cholesterol (LDL-c) concentration. It was found that there were no serious or severe adverse events, no

discontinuations for adverse events, and no dose-limiting toxicities (US9266961).

Antibody First Published in: Zhang et al. Discovery of a cryptic peptide-binding site on PCSK9 and design of antagonists. Nat Struct Mol Biol. 2017 Oct;24(10):848-856. [PMID:28825733](#)

Note on publication: Describes the generation of antagonistic antibodies that encroach on the EGF(A)-binding site and inhibit LDLR binding.

Product Form

Size: 200 µg Purified antibody.

Purification: Protein A affinity purified

Supplied In: PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.