

PCSK9 (H-160): sc-66996

BACKGROUND

Proprotein convertase subtilisin/kexin type 9 (PCSK9), also known as NARC-1, is a 692 amino acid protein that belongs to the peptidase S8 family and contains one peptidase S8 domain. Important in the regulation of plasma cholesterol homeostasis, PCSK9 binds to low-density lipoprotein receptor family members LDLR, very low-density lipoprotein receptor (VLDLR) and apolipoprotein receptor 2 (ApoER2) and promotes their degradation in intracellular acidic compartments. PCSK9 also plays a role in neuronal differentiation and apoptosis. PCSK9 is expressed in Schwann cells, neuro-epithelioma, colon carcinoma, and hepatic and pancreatic cell lines. PCSK9 levels in the brain are highest in the cerebellum during perinatal development, with ischemia causing increased levels in the adult brain. Defects in the gene encoding this protein causes the autosomal dominant disorder familial hypercholesterolemia 3 (HCHOLA3).

REFERENCES

1. Abifadel, M., et al. 2003. Mutations in PCSK9 cause autosomal dominant hypercholesterolemia. *Nat. Genet.* 34: 154-156.
2. Naureckiene, S., et al. 2003. Functional characterization of Narc 1, a novel proteinase related to proteinase K. *Arch. Biochem. Biophys.* 420: 55-67.

CHROMOSOMAL LOCATION

Genetic locus: PCSK9 (human) mapping to 1p32.3; Pcsk9 (mouse) mapping to 4 C7.

SOURCE

PCSK9 (H-160) is a rabbit polyclonal antibody raised against amino acids 175-334 mapping within an internal region of PCSK9 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

PCSK9 (H-160) is recommended for detection of PCSK9 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for PCSK9 siRNA (h): sc-45482, PCSK9 siRNA (m): sc-45483, PCSK9 shRNA Plasmid (h): sc-45482-SH, PCSK9 shRNA Plasmid (m): sc-45483-SH, PCSK9 shRNA (h) Lentiviral Particles: sc-45482-V and PCSK9 shRNA (m) Lentiviral Particles: sc-45483-V.

Molecular Weight (predicted) of PCSK9 isoforms: 74/21 kDa.

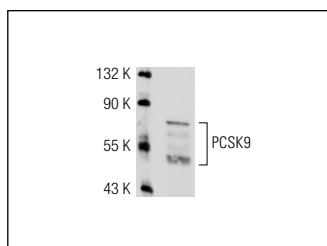
Molecular Weight (observed) of PCSK9: 71-90 kDa.

Positive Controls: SW480 cell lysate: sc-2219, MIA PaCa-2 cell lysate: sc-2285 or rat intestine tissue extract: sc-364811.

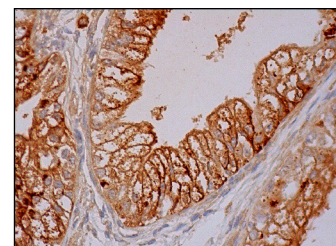
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



PCSK9 (H-160): sc-66996. Western blot analysis of PCSK9 expression in rat intestine tissue extract.



PCSK9 (H-160): sc-66996. Immunoperoxidase staining of formalin fixed, paraffin-embedded human epididymis tissue showing membrane and cytoplasmic staining of glandular cells.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **PCSK9 (F-8): sc-515082**, our highly recommended monoclonal alternative to PCSK9 (H-160).