

PCSK1N (D-11): sc-398295

BACKGROUND

PCSK1N (proprotein convertase subtilisin/kexin type 1 inhibitor), also known as SAAS or PROSAAS, is a 260 amino acid protein that is both secreted and localized to the *trans*-Golgi network. Expressed in pancreas and brain, PCSK1N is thought to play a role in the control of the neuroendocrine secretory pathway and may also be involved in PCSK1 inhibition. The gene encoding PCSK1N maps to human chromosome X, which contains nearly 153 million base pairs and houses over 1,000 genes. In conjunction with chromosome Y, chromosome X is responsible for sex determination, as an X and a Y chromosome lead to normal male development, while two copies of an X chromosome lead to normal female development. There are a number of conditions related to an abnormal number and combination of sex chromosomes, some of which include Turner's syndrome, color blindness, hemophilia and Duchenne muscular dystrophy.

REFERENCES

- Fricker, L.D., et al. 2000. Identification and characterization of proSAAS, a granin-like neuroendocrine peptide precursor that inhibits prohormone processing. *J. Neurosci.* 20: 639-648.
- Basak, A., et al. 2001. Inhibitory specificity and potency of proSAAS-derived peptides toward proprotein convertase 1. *J. Biol. Chem.* 276: 32720-32728.
- Fortenberry, Y., et al. 2002. Functional characterization of ProSAAS: similarities and differences with 7B2. *J. Biol. Chem.* 277: 5175-5186.
- Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 300399. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: *Pcsk1n* (mouse) mapping to X A1.1.

SOURCE

PCSK1N (D-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 47-69 near the N-terminus of PCSK1N of mouse origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

PCSK1N (D-11) is available conjugated to agarose (sc-398295 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398295 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398295 PE), fluorescein (sc-398295 FITC), Alexa Fluor® 488 (sc-398295 AF488), Alexa Fluor® 546 (sc-398295 AF546), Alexa Fluor® 594 (sc-398295 AF594) or Alexa Fluor® 647 (sc-398295 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398295 AF680) or Alexa Fluor® 790 (sc-398295 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-398295 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

PCSK1N (D-11) is recommended for detection of PCSK1N of mouse and rat origin by Western Blotting (starting dilution 1:100, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for PCSK1N siRNA (m): sc-152119, PCSK1N shRNA Plasmid (m): sc-152119-SH and PCSK1N shRNA (m) Lentiviral Particles: sc-152119-V.

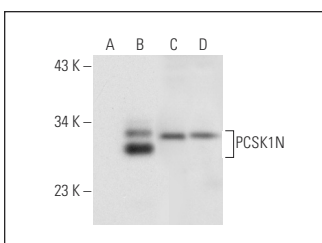
Molecular Weight of PCSK1N: 26 kDa.

Positive Controls: PCSK1N (m): 293T Lysate: sc-122441, mouse brain extract: sc-2253 or rat brain extract: sc-2392.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



PCSK1N (D-11): sc-398295. Western blot analysis of PCSK1N expression in non-transfected: sc-117752 (A) and mouse PCSK1N transfected: sc-122441 (B) 293T whole cell lysates and mouse brain (C) and rat brain (D) tissue extracts.

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 for detailed protocols and support products.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA