

PCSK1N (m): 293T Lysate: sc-122441

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

1. 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.
2. Basak, A., et al. 2001. Inhibitory specificity and potency of PROSAAS-derived peptides toward proprotein convertase 1. *J. Biol. Chem.* 276: 32720-32728.
3. Fortenberry, Y., et al. 2002. Functional characterization of PROSAAS: similarities and differences with 7B2. *J. Biol. Chem.* 277: 5175-5186.
4. 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/>
5. Kikuchi, K., et al. 2003. An N-terminal fragment of PROSAAS (a granin-like neuroendocrine peptide precursor) is associated with Tau inclusions in Pick's disease. *Biochem. Biophys. Res. Commun.* 308: 646-654.
6. Wada, M., et al. 2004. A human granin-like neuroendocrine peptide precursor (PROSAAS) immunoreactivity in Tau inclusions of Alzheimer's disease and Parkinsonism-dementia complex on Guam. *Neurosci. Lett.* 356: 49-52.
7. Chakraborty, T.R., et al. 2006. Quantification of VGF- and PROSAAS-derived peptides in endocrine tissues and the brain, and their regulation by diet and cold stress. *Brain Res.* 1089: 21-32.
8. Kudo, H., et al. 2009. Identification of proSAAS homologs in lower vertebrates: conservation of hydrophobic helices and convertase-inhibiting sequences. *Endocrinology* 150: 1393-1399.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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

CHROMOSOMAL LOCATION

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

PRODUCT

PCSK1N (m): 293T Lysate represents a lysate of mouse PCSK1N transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

PCSK1N (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive PCSK1N antibodies. Recommended use: 10-20 µl per lane.

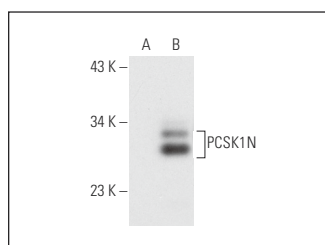
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

PCSK1N (D-11): sc-398295 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse PCSK1N expression in PCSK1N transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

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.

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.

RESEARCH USE

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