

PROSAAS Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP54595

Specification

PROSAAS Polyclonal Antibody - Product Information

Application Primary Accession Host Clonality Calculated MW Physical State Immunogen Epitope Specificity Isotype Purity affinity purified by Protein A	IHC-P, IHC-F, IF, ICC, E <u>O9UHG2</u> Rabbit Polyclonal 24 KDa Liquid KLH conjugated synthetic peptide derived from human PROSAAS 34-130/260 IgG
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02%
SUBCELLULAR LOCATION	Proclin300 and 50% Glycerol. Secreted. Golgi apparatus > trans-Golgi network. A N-terminal processed peptide, probably Big SAAS or Little SAAS, is accumulated in cytoplasmic protein tau deposits in frontotemporal dementia and parkinsonism linked to chromosome 17 (Pick disease), Alzheimer disease and amyotrophic lateral sclerosis-parkinsonism/dementia complex 1.
SUBUNIT	Interacts via the C-terminal inhibitory domain with PCSK1 65 kDa form.
Post-translational modifications Important Note	Proteolytically cleaved in the Golgi. Big SAAS, Little SAAS, PEN and Big LEN are the major processed peptides in proSAAS-overexpressing PC-12 phaeochromocytoma cells (lacking PCSK1 and PCSK2 endopeptidases). Peptides corresponding to PEN and a proSAAS aa 40-59 have been detected in wild-type PC-12 cells. This product as supplied is intended for research use only, not for use in human,
Background Descriptions	therapeutic or diagnostic applications.

Background Descriptions

The protein encoded by this gene functions as an inhibitor of prohormone convertase 1, which regulates the proteolytic cleavage of neuroendocrine peptide precursors. The proprotein is further processed into multiple short peptides. A polymorphism within this gene may be associated with obesity. [provided by RefSeq, Aug 2013]



PROSAAS Polyclonal Antibody - Additional Information

Gene ID 27344

Other Names

ProSAAS, Proprotein convertase subtilisin/kexin type 1 inhibitor, Proprotein convertase 1 inhibitor, pro-SAAS, KEP, Big SAAS, b-SAAS, Little SAAS, I-SAAS, N-proSAAS, Big PEN-LEN, b-PEN-LEN, SAAS CT(1-49), PEN, Little LEN, I-LEN, Big LEN, b-LEN, SAAS CT(25-40), PCSK1N

Target/Specificity Expressed in brain and pancreas.

Dilution

IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>ICC~~N/A<br \>E~~N/A

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

PROSAAS Polyclonal Antibody - Protein Information

Name PCSK1N

Function

May function in the control of the neuroendocrine secretory pathway. Proposed be a specific endogenous inhibitor of PCSK1. ProSAAS and Big PEN-LEN, both containing the C-terminal inhibitory domain, but not the further processed peptides reduce PCSK1 activity in the endoplasmic reticulum and Golgi. It reduces the activity of the 84 kDa form but not the autocatalytically derived 66 kDa form of PCSK1. Subsequent processing of proSAAS may eliminate the inhibition. Slows down convertase-mediated processing of proopiomelanocortin and proenkephalin. May control the intracellular timing of PCSK1 rather than its total level of activity (By similarity).

Cellular Location

Secreted {ECO:0000250|UniProtKB:Q9QXV0}. Golgi apparatus, trans-Golgi network {ECO:0000250|UniProtKB:Q9QXV0}. Note=A N-terminal processed peptide, probably Big SAAS or Little SAAS, is accumulated in cytoplasmic protein tau deposits in frontotemporal dementia and parkinsonism linked to chromosome 17 (Pick disease), Alzheimer disease and amyotrophic lateral sclerosis- parkinsonism/dementia complex 1 (Guam disease)

Tissue Location

Expressed in brain and pancreas.

PROSAAS Polyclonal Antibody - Protocols



Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

PROSAAS Polyclonal Antibody - Images