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PROSAAS Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP54595

Product Information

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q9UHG2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	27372
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human PROSAAS
Epitope Specificity	34-130/260
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	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	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.
Important Note	This product as supplied is intended for research use only, not for use in human, 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]

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, l-SAAS, N-proSAAS, Big PEN-LEN, b-PEN-LEN, SAAS CT(1-49), PEN, Little LEN, l-LEN, Big LEN, b-LEN, SAAS CT(25-40), PCSK1N
Target/Specificity	Expressed in brain and pancreas.

Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 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.

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.