abcam

Product datasheet

Recombinant Human ProSAAS protein (denatured) ab174456

1 Image

Description

Product name Recombinant Human ProSAAS protein (denatured)

Purity > 85 % SDS-PAGE.

Expression system Escherichia coli

Accession Q9UHG2

Protein length Full length protein

Animal free No

Nature Recombinant

Species Human

Sequence MGSSHHHHHHSSGLVPRGSHMGSMARPVKEPRGLSAAS

PPLAETGAPRRF

RRSVPRGEAAGAVQELARALAHLLEAERQERARAEAQE

AEDQQARVLAQL

LRVWGAPRNSDPALGLDDDPDAPAAQLARALLRARLDP

AALAAQLVPAPV

PAAALRPRPPVYDDGPAGPDAEEAGDETPDVDPELLRYL

LGRILAGSADS

EGVAAPRRLRRAADHDVGSELPPEGVLGALLRVKRLETP

APQVPARRLLP P

Predicted molecular weight 27 kDa including tags

Amino acids 34 to 260

Tags His tag N-Terminus

Additional sequence information NCBI Accession No.: NP_037403

Description Recombinant Human ProSAAS protein

Specifications

Our <u>Abpromise guarantee</u> covers the use of ab174456 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications SDS-PAGE

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Preparation and Storage

Stability and Storage

Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

pH: 8.00

Constituents: 2.4% Urea, 10% Glycerol (glycerin, glycerine), 0.32% Tris HCl

General Info

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. The function of the processed secreted peptides is not known.

Tissue specificity

Expressed in brain and pancreas.

Domain

ProSAAS(1-180) increases secretion of enzymatically inactive PCSK1.

The C-terminal inhibitory domain is involved in inhibition of PCSK1. It corresponds to the probable processing intermediate Big PEN-LEN, binds to PCSK1 in vitro and contains the hexapeptide L-

L-R-V-K-R, which, as a synthetic peptide, is sufficient for PCSK1 inhibition.

Post-translational modifications

Proteolytically cleaved in the Golgi.

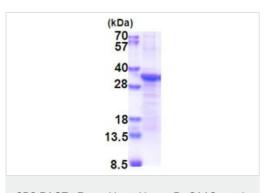
ations O-glycosylated with a core 1 or possibly core 8 glycan.

Cellular localization

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.

Images



SDS-PAGE - Recombinant Human ProSAAS protein (denatured) (ab174456)

15% SDS-PAGE analysis of ab174456 (3 µg)

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