abcam

Product datasheet

Recombinant Human ITM2B protein ab160492

1 Image

Description

Product name	Recombinant Human ITM2B protein
Expression system	Wheat germ
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	MVKVTFNSALAQKEAKKDEPKSGEEALIIPPDAVAVDCK DPDDVVPVGQR RAWCWCMCFGLAFMLAGVILGGAYLYKYFALQPDDVYYC GIKYIKDDVIL NEPSADAPAALYQTIEENIKIFEEEEVEFISVPVPEFADSDP ANIVHDFN KKLTAYLDLNLDKCYVIPLNTSIVMPPRNLLELLINIKAGTYL PQSYLIH EHMVITDRIENIDHLGFFIYRLCHDKETYKLQRRETIKGIQKR EASNCFA IRHFENKFAVETLICS
Amino acids	1 to 266
Tags	GST tag N-Terminus

Specifications

Our **Abpromise guarantee** covers the use of **ab160492** in the following tested applications.

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

Applications	ELISA Western blot
Form	Liquid
Additional notes	

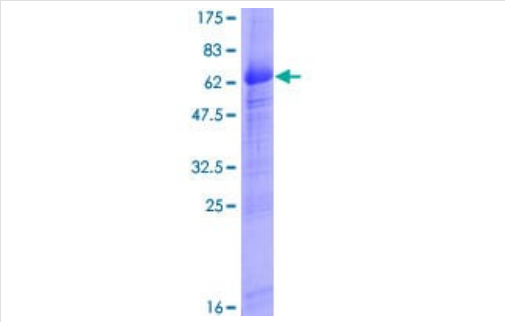
Preparation and Storage

Stability and Storage	Shipped on dry ice. Upon delivery aliquot and store at -80ºC. Avoid freeze / thaw cycles. pH: 8.00 Constituents: 0.31% Glutathione, 0.79% Tris HCl

General Info

Function	Functions as a protease inhibitor. Plays a role in APP processing regulating the physiological production of the beta amyloid peptide. Restricts docking of gamma-secretase to APP and access of alpha- and beta-secretase to their cleavage APP sequence.
Tissue specificity	Expressed in brain and in other tissues.
Involvement in disease	Defects in ITM2B are a cause of cerebral amyloid angiopathy ITM2B-related type 1 (CAA-ITM2B1) [MIM:176500]. A disorder characterized by amyloid deposition in the walls of cerebral blood vessels and neurodegeneration in the central nervous system. Cerebral amyloid angiopathy, non-neuritic and perivascular plaques and neurofibrillary tangles are the predominant pathological lesions. Clinical features include progressive mental deterioration, spasticity and muscular rigidity. Defects in ITM2B are a cause of cerebral amyloid angiopathy ITM2B-related type 2 (CAA-ITM2B2) [MIM:117300]; also known as heredopathia ophthalmo-oto-encephalica. A disorder characterized by amyloid deposition in the walls of the blood vessels of the cerebrum, choroid plexus, cerebellum, spinal cord and retina. Plaques and neurofibrillary tangles are observed in the hippocampus. Clinical features include progressive ataxia, dementia, cataracts and deafness.
Sequence similarities	Belongs to the ITM2 family. Contains 1 BRICHOS domain.
Post-translational modifications	The C-terminal part of the ectodomain is processed by furin and related proteases producing a secreted peptide of 4 to 5 kDa. For the ABRI and ADAN variants the C-terminal secreted peptide is larger and may produce amyloid fibrils responsible for neuronal dysfunction and dementia. The remaining part of the ectodomain containing the BRICHOS domain is cleaved by ADAM10 and is secreted as a peptide of 25 kDa. The membrane-bound N-terminal fragment (NTF) of 22 kDa is further proteolytically processed by SPPL2A and SPPL2B through regulated intramembrane proteolysis producing a secreted peptide (BRI2C) and an intracellular domain (ICD) released in the cytosol.
Cellular localization	Golgi apparatus membrane. Cell membrane.

Images



SDS-PAGE - Recombinant Human ITM2B protein (ab160492)

ab160492 on a 12.5% SDS-PAGE stained with Coomassie Blue.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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