

ITM2B Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP13163b**Specification**

ITM2B Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [Q9Y287](#)**ITM2B Antibody (C-term) Blocking Peptide - Additional Information**

Gene ID 9445

Other Names

Integral membrane protein 2B, Immature BRI2, imBRI2, Protein E25B, Transmembrane protein BRI, Bri, BRI2, membrane form, Mature BRI2, mBRI2, BRI2 intracellular domain, BRI2 ICD, BRI2C, soluble form, Bri23 peptide, Bri2-23, ABri23, C-terminal peptide, P23 peptide, ITM2B, BRI, BRI2

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP13163b was selected from the C-term region of ITM2B. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ITM2B Antibody (C-term) Blocking Peptide - Protein Information

Name ITM2B

Synonyms BRI, BRI2

Function

Plays a regulatory role in the processing of the amyloid-beta A4 precursor protein (APP) and acts as an inhibitor of the amyloid-beta peptide aggregation and fibrils deposition. Plays a role in the induction of neurite outgrowth. Functions as a protease inhibitor by blocking access of secretases to APP cleavage sites. Bri23 peptide prevents aggregation of APP amyloid-beta protein 42 into toxic oligomers.

Cellular Location

[Integral membrane protein 2B]: Golgi apparatus membrane; Single-pass type II membrane protein Note=Immature BRI2 (imBRI2) is cleaved by furin in the Golgi into mBRI2 and a Bri23

peptide. mBRI2 is transported to the plasma membrane and Bri23 peptide is secreted [Bri23 peptide]: Secreted. Note=Detected in the cerebral spinal fluid (CSF).

Tissue Location

Ubiquitous. Expressed in brain.

ITM2B Antibody (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

ITM2B Antibody (C-term) Blocking Peptide - Images**ITM2B Antibody (C-term) Blocking Peptide - Background**

Amyloid precursor proteins are processed by beta-secretase and gamma-secretase to produce beta-amyloid peptides which form the characteristic plaques of Alzheimer disease. This gene encodes a transmembrane protein which is processed at the C-terminus by furin or furin-like proteases to produce a small secreted peptide which inhibits the deposition of beta-amyloid. Mutations which result in extension of the C-terminal end of the encoded protein, thereby increasing the size of the secreted peptide, are associated with two neurodegenerative diseases, familial British dementia and familial Danish dementia.

ITM2B Antibody (C-term) Blocking Peptide - References

Peng, S., et al. Biochem. Biophys. Res. Commun. 393(3):356-361(2010) Matsuda, S., et al. J. Biol. Chem. 284(23):15815-15825(2009) Matsuda, S., et al. Mol Neurodegener 4, 41 (2009) :Tsachaki, M., et al. Biotechnol J 3(12):1548-1554(2008) Kim, J., et al. J. Neurosci. 28(23):6030-6036(2008)