

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)