

Product datasheet for **RC202377**

ITM2B (NM_021999) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ITM2B (NM_021999) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ITM2B
Synonyms:	ABRI; BRI; BRI2; BRICD2B; E3-16; E25B; FBD; imBRI2; RDGCA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC202377 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTGAAGGTGACGTTCAACTCCGCTCTGGCCAGAAGGAGACCAAGAAGGACGAGCCCAAGAGCGGCG
AGGAGGCGCTCATCATCCCCCGACGCCGTCGCGGTGGACTGCAAGGACCCAGATGATGTGGTACCAGT
TGGCCAAAGAAGAGCCTGGTGTGGTGCATGTGCTTTGGACTAGCATTATGCTTGCAGGTGTTATTCTA
GGAGGAGCATACTTGACAAATATTTGCACTTCAACCAGATGACGTGTACTACTGTGGAATAAAGTACA
TCAAAGATGATGTCATCTTAAATGAGCCCTCTGCAGATGCCCCAGCTGCTCTACCAGACAATTGAAGA
AAATATTAATAATCTTTGAAGAAGAAGTTGAATTTATCAGTGTGCCTGTCCCAGATTTGCAGATAGT
GATCCTGCCAACATTGTTTCATGACTTTAAACAAGAACTTACAGCCTATTTAGATCTTAACTGGATAAGT
GCTATGTGATCCCTCTGAACACTTCCATTGTTATGCCACCCAGAACTACTGGAGTTACTTATTAACAT
CAAGGCTGGAACCTATTTGCCTCAGTCCTATCTGATTCATGAGCACATGGTTATTACTGATCGCATTGAA
AACATTGATCACCTGGGTTTCTTTATTTATCGACTGTGTCATGACAAGGAACTTACAACTGCAACGCA
GAGAACTATTAAGGTATTCAGAAACGTGAAGCCAGCAATTGTTTCGCAATTCGGCATTGTTGAAAAACA
ATTTGCCGTGAACTTTAATTTGTTCT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC202377 protein sequence
 Red=Cloning site Green=Tags(s)

MVKVTFNSALAQKETKKDEPKSGEEALIPPDAVAVDCKDPDDVVPVQRRRAWCWCFCGLAFMLAGVIL
 GGAYLYKYFALQPDDVYYCGIKYIKDDVILNEPSADAPAALYQTEENIKIFEEEEVEFISVPVPEFADS
 DPANIVHDFNKKLTAYLDLNLDKCYVIPLNTSIVMPRNLLELLINIKAGTYLPQSYLIHEHMVITDRIE
 NIDHLGFFIYRLCHDKETYKLRRETIKGIQKREASNCFAIRHFENKFAVETLIC

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6307_f05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_021999

ORF Size: 798 bp

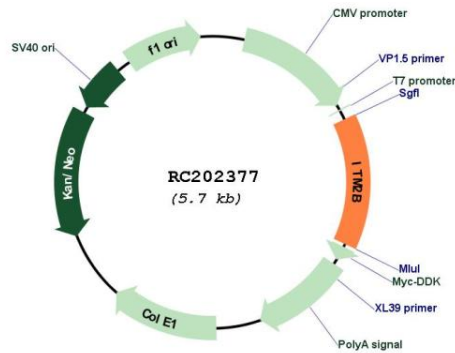
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

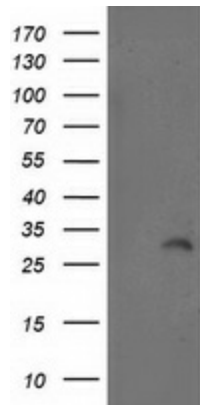
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_021999.5
RefSeq Size:	1896 bp
RefSeq ORF:	801 bp
Locus ID:	9445
UniProt ID:	Q9Y287
Cytogenetics:	13q14.2
Domains:	BRICHOS
Protein Families:	Druggable Genome, Transmembrane
MW:	30.4 kDa
Gene Summary:	<p>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. [provided by RefSeq, Oct 2009]</p>

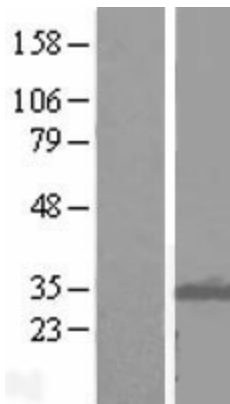
Product images:



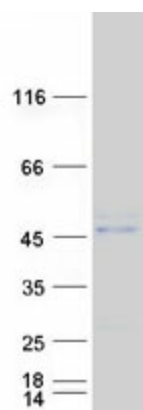
Circular map for RC202377



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ITM2B (Cat# RC202377, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ITM2B (Cat# [TA502734]). Positive lysates [LY411840] (100ug) and [LC411840] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY411840]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202377 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ITM2B protein (Cat# [TP302377]). The protein was produced from HEK293T cells transfected with ITM2B cDNA clone (Cat# RC202377) using MegaTran 2.0 (Cat# [TT210002]).