

Product datasheet for **RC236551**

ITM2C (NM_001287240) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: ITM2C (NM_001287240) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: ITM2C
Synonyms: BRI3; BRICD2C; E25; E25C; ITM3
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RC236551 representing NM_001287240
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGGGCATGGTCGTGCTCATGGGCCTCGTGTTCGCCTCTGTCTACATCTACAGATACTTCTTCCTTG
CGCAGCTGGCCCGAGATAACTTCTCCGCTGTGGTGTGCTGTATGAGGACTCCCTGTCTCCAGGTCCG
GACTCAGATGGAGCTGGAAGAGGATGTGAAAATCTACCTCGACGAGAAGTACGAGCGCATCAACGTGCCT
GTGCCCAAGTTTGGCGGGGTGACCTGCAGACATCATCCATGACTTCCAGCGGGGTCTGACTGCGTACC
ATGATATCTCCCTGGACAAGTGCTATGTATCGAACTCAACACCACCATTTGTGCTGCCCCCTCGCAACT
CTGGGAGCTCCTCATGAACGTGAAGAGGGGGACCTACCTGCCGACGAGTACATCATCCAGGAGGAGATG
GTGGTCACGGAGCATGTCAAGTGAACAAGGAGGCCCTGGGGTCTTCATCTACCACCTGTGCAACGGGAAAG
ACACCTACCGGCTCCGGCGCCGGCAACGCGGAGGCGGATCAACAAGCGTGGGGCCAAGAAGTGAATGC
CATCCGCCACTTCGAGAACCTTCGTGGTGGAGACGCTCATCTGCGGGGTGGTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC236551 representing NM_001287240
 Red=Cloning site Green=Tags(s)

MGMVVLLMGLVFAVYIYRYFFLAQLARDNFFRCGVLYEDSLSSQVRTQMELEEDVKIYLDENYERINVP
VPQFGGDPADIIHDFQRGLTAYHDISLDKCYVIELNTTIVLPPRNFWELLMNVKRGTYLPQTYIIQEEM
VVEHVSDKEALGSFIYHLCNGKDTYRLRRRATRRRINKRGAKNCNAIRHFENTFVETLICGVV

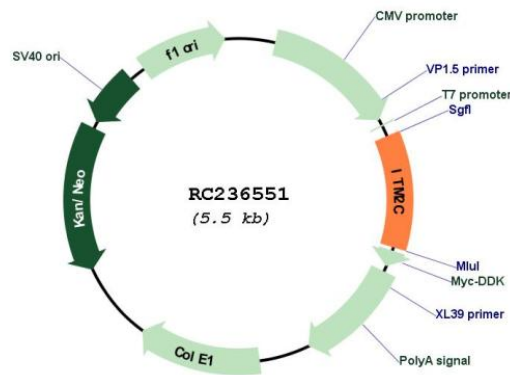
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI



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Cloning Scheme:

Plasmid Map:


ACCN: NM_001287240

ORF Size: 615 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:

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_001287240.2](#)

RefSeq Size: 2051 bp

RefSeq ORF: 618 bp

Locus ID: 81618

UniProt ID: [Q9NQX7](#)

Cytogenetics: 2q37.1

Protein Families: Transmembrane

MW: 24.4 kDa

Gene Summary: Negative regulator of amyloid-beta peptide production. May inhibit the processing of APP by blocking its access to alpha- and beta-secretase. Binding to the beta-secretase-cleaved APP C-terminal fragment is negligible, suggesting that ITM2C is a poor gamma-secretase cleavage inhibitor. May play a role in TNF-induced cell death and neuronal differentiation (By similarity).[UniProtKB/Swiss-Prot Function]