

Product datasheet for **MC212068**

Bmt2 (NM_175312) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Bmt2 (NM_175312) Mouse Untagged Clone
Tag: Tag Free
Symbol: Bmt2
Synonyms: A1666701; B630005N14Rik
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC212068 representing NM_175312
Red=Cloning site **Blue**=ORF **Orange**=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGC**C

ATGGAGCCGGGGCCGGTGGCCGAGGCGCAGCGCGGGACAGCGCCCCGAACCGCGCAGCCCCGGG
AGCAGGAGCGGAAGCTGGAGCAGGAGAAGCTGTCCGGGGTGGTGAAGAGCGTTCATCGCGGCTCCGCAA
GAAGTACCGCGAAGTGGGAGACTTTGATAAGATCTGGCGAGAACACTGTGAAGATCGGAAACACTTTGC
GAATATGCTGTTGCAATGAAAACTGGCAGATAATCACTGGGCAAAAACCTGTGAGGGTGAAGGTCGCA
TTGAATGGTGTGTAGTGTATGCAGAGAGTACTTCCAAAATGGTGGGAAAAGAAAAGCACTTGAGAAAGA
TGAAAAACGAGCTGTCCTCGCCACTAAGACCACTCCAGCCTTAAACGTGCACGAGTCTTCTAAACTTGAA
GGTCTTTAACAACCTCAGCTTTACAAGCCCTGACTTTATAACTGAGTTGCTTCAAGCCTCAGGAAAGA
TCAGATTACTTGATGTTGGCAGCTGCTTAAATCCATTTTTGAAGTTTGAAGAATTTTAACTGTTGGCAT
AGATATTGTACCTGCTGTAGAGAGTGTATAAGTGTGACTTCTGAACCTGCAGCTGCAGCAGCCACTC
CAGCTTGCACAAGATGCTATAGATGCTTTTCTGAAGCAGCTGAGAAATCCTATTGATGCTTCCGGGGG
AACTTTTTCATGTGGTGTCTTCTCTCTCTTTCTTATTTCCATCACCCACCACCGATGATGCTTCCCAT
CTGCAAGAAAGCCCATGAGCTGTTAGTCTGAACGGCTTATTGCTCATCACTCCCGATTCTCCCAT
CAGAACCAGCAGCTATGATGATGAAGAGCTGGAAGATTGCTATAGAATCCCTGGTTTTAAGCGCTTCA
AGTATTCAAAATTTCTCATATGCATCTCATGGCTTTTAGAAAAACCTCCCTTAAACCACAAGTGACTT
GGTTAGCAGGAATATCCAGGGATGTTGTATTTCTCAAGATTTCAACAGTGTAGAAGAGGAGGAGTAT
TCTAACACTTCTGCTATGTCGATCAGATCTAGAAGTGAACAACCTCGCATACGGTTTCACGGAGCTCC
CCGAAGCTCCTTATGATCCGATTCTGGAGAAAGCCAAGCCAGCTCTATTCCATTTTATGAGTTAGAGGA
TCCCATTTACTTTTAAGCT**TAA**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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| Restriction Sites: | Sgfl-Mlul |
| ACCN: | NM_175312 |
| Insert Size: | 1212 bp |
| OTI Disclaimer: | Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP). |
| 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_175312.4 , NP_780521.2 |
| RefSeq Size: | 4147 bp |
| RefSeq ORF: | 1212 bp |
| Locus ID: | 101148 |
| UniProt ID: | Q8BXK4 |
| Cytogenetics: | 6 A1 |
| Gene Summary: | S-adenosyl-L-methionine-binding protein that acts as an inhibitor of mTORC1 signaling via interaction with the GATOR1 and KICSTOR complexes. Acts as a sensor of S-adenosyl-L-methionine to signal methionine sufficiency to mTORC1: in presence of methionine, binds S-adenosyl-L-methionine, leading to disrupt interaction with the GATOR1 and KICSTOR complexes and promote mTORC1 signaling. Upon methionine starvation, S-adenosyl-L-methionine levels are reduced, thereby promoting the association with GATOR1 and KICSTOR, leading to inhibit mTORC1 signaling. Probably also acts as a S-adenosyl-L-methionine-dependent methyltransferase.[UniProtKB/Swiss-Prot Function] |