

Product datasheet for **RG220496**

BMT2 (NM_152556) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	BMT2 (NM_152556) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	BMT2
Synonyms:	C7orf60; SAMTOR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG220496 representing NM_152556 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGC**C

ATGGAGCCAGGGCGCGCGCGAAATACTGCTCGTGCGCAGAGGGCGGGTCCCCGAACACTCCGCCG
 CCGGGAGCAGGAGCGGAACTGGAGCAGGAGAAGCTCTCCGGTGTGGTGAAGAGCGTCCACCGCGGCT
 CCGCAAGAAGTACCGAGAAGTGGGAGATTTTGATAAGATCTGGCAGAACTGTGAGGATGAAGAACT
 CTTTGTGAATATGCCGTGCAATGAAAAATTTGCGAGATAATCATTGGGCAAACTTGTGAGGGCGAAG
 GTCGTATTGAATGGTGTGTAGTGTATGCAGAGAATATTTCCAAATGGTGGGAAGAGAAAAGCACTTGA
 GAAAGATGAAAAAGAGCTGTACTTGCCACTAAGACCACTCCAGCCTTAAATATGCATGAGTCTTCTCAA
 CTTGAAGGTCATTTAACCAACCTCAGCTTTACAAACCTGAATTTATAACTGAGTTGCTACAAGCCTCAG
 GAAAAATCAGATTACTTGATGTTGGCAGCTGCTTTAACCCATTTCTGAAGTTTGAAGATTTCTAACTGT
 TGGCATAGATATTGTACCTGCTGTAGAGAGTGTCTATAAATGTGATTTCTGAACCTACAGCTTCAGCAA
 CCACTCCAGCTTGACAGGATGCTATAGATGCTTTTTGAAGCAGCTGAAAAACCTATTGATTCTCTTC
 CTGGAGAGCTTTCCATGTGGTTGTTTTCTCTCTCTCTTTCTTATTTTCCATCTCCTTACCAGCGATG
 GATTTGCTGCAAGAAAGCCCATGAACTGTTAGTGTTAAATGGTTTATTACTAATCATCACACCTGATTCC
 TCCCATCAGAACCGTCATGCTATGATGATGAAAAGCTGGAAGATTGCTATAGAGTCCCTGGGCTTTAAAC
 GCTTCAAGTACTCAAAATTTTCACATATGCATCTGATGGCATTTAGGAAAATCTCTCTAAAAACCAAG
 TGACTTGTTAGTAGGAACCTACCGAGGAATGTTATATATTCCTCAAGATTTCAACAGTATAGAAGATGAG
 GAATATTCTAACCTTCTGCTATGTTTCGATCAGATATAGAAGATGAACAACCTAGCATATGGTTTCACAG
 AACTCCCTGATGCGCCATATGACTCAGATTCTGGAGAAAGTCAAGCCAGCTCTATTCTTTCTATGAGCT
 AGAAGACCCCATATTACTTTTAAGT

ACGCGTACGCGGCGGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

Protein Sequence: >RG220496 representing NM_152556
 Red=Cloning site Green=Tags(s)

MEPGAGGRNTARAQRAGSPNTPPPQERKLEQEKLSGVVKSVMHRLRKKYREVGFDFDKIWEHCEDEET
 LCEYAVAMKNLADNHWAKTCEGEGRIEWCCSVCREYFQNGGKRKALEKDEKRAVLATKTPALNMHESQ
 LEGHLTNLSFTNPEFITELLQASGKIRLLDVGSFCNPFLLKFEFLTVGIDIVPAVESVYKCDFLNLQLQQ
 PLQLAQDAIDAFLLKQLKNPIDSLPGELFHVVFSLLLSYFSPYQWRWICCKKAHELLVLNGLLLIITPDS
 SHQNRHAMMMKSWKIAIESLGFKRFKYSKFSMHMLMAFRKISLKTSDLVSRNYPGMLYIPQDFNSIEDE
 EYSNPSCYVRSIDIEQLAYGFTLPDAPYDSGSGESQASSIPFYELEDPIILLLS

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_152556

ORF Size: 1215 bp

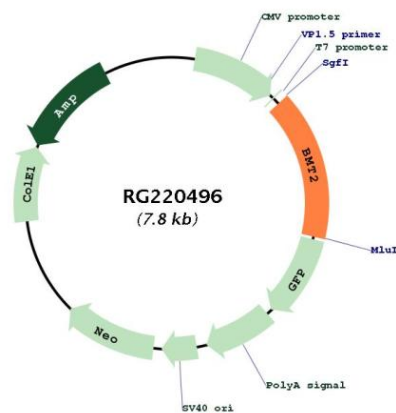
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_152556.3</u>
RefSeq Size:	3969 bp
RefSeq ORF:	1218 bp
Locus ID:	154743
UniProt ID:	<u>Q1RMZ1</u>
Cytogenetics:	7q31.1
Gene Summary:	S-adenosyl-L-methionine-binding protein that acts as an inhibitor of mTORC1 signaling via interaction with the GATOR1 and KICSTOR complexes (PubMed:29123071). 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 (PubMed:29123071). Upon methionine starvation, S-adenosyl-L-methionine levels are reduced, thereby promoting the association with GATOR1 and KICSTOR, leading to inhibit mTORC1 signaling (PubMed:29123071). Probably also acts as a S-adenosyl-L-methionine-dependent methyltransferase (Potential).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG220496