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Product datasheet for RC202680

MAT2B (NM_182796) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MAT2B (NM_182796) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MAT2B
Synonyms:	MAT-II; MATIIbeta; Nbla02999; SDR23E1; TGR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC202680 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCCTGAAATGCCAGAGGACATGGAGCAGGAGGAAGTTAACATCCCTAATAGGAGGGTTCTGGTTACTG
GTGCCACTGGGCTTCTTGGCAGAGCTGTACACAAAGAATTTCAGCAGAATAATTGGCATGCAGTTGGCTG
TGGTTTCAGAAGAGCAAGACCAAAATTTGAACAGGTTAATCTGTTGGATTCTAATGCAGTTCATCACATC
ATTCATGATTTTCAGCCCCATGTTATAGTACATTGTGCAGCAGAGAGAAGACCAGATGTTGTAGAAAATC
AGCCAGATGCTGCCTCTCAACTTAATGTGGATGCTTCTGGGAATTTAGCAAAGGAAGCAGCTGCTGTTGG
AGCATTTCTCATCTACATTAGCTCAGATTATGTATTTGATGGAACAAATCCACCTTACAGAGAGGAAGAC
ATACCAGCTCCCCTAAATTTGTATGGCAAAACAAAATTAGATGGAGAAAAGGCTGTCCTGGAGAACAATC
TAGGAGCTGCTGTTTTGAGGATTCCTATTCTGTATGGGGAAGTTGAAAAGCTCGAAGAAAGTGCTGTGAC
TGTTATGTTTGATAAAGTGCAGTTCAGCAACAAGTCAGCAAACATGGATCACTGGCAGCAGAGGTTCCCC
ACACATGTCAAAGATGTGGCCACTGTGTGCCGGCAGCTAGCAGAGAAGAGAATGCTGGATCCATCAATTA
AGGGAACCTTTCACTGGTCTGGCAATGAACAGATGACTAAGTATGAAATGGCATGTGCAATTGCAGATGC
CTTCAACCTCCCCAGCAGTCACTTAAGACCTATTACTGACAGCCCTGTCCTAGGAGCACAACGTCCGAGA
AATACTCAGCTTGACTGCTCCAAATTGGAGACCTTGGGCATTGGCCAACGAACACCATTTCGAATTGGAA
TCAAAGAATCACTTTGGCCTTTCCTCATTGACAAGAGATGGAGACAAACGGTCTTTCAT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

>RC202680 protein sequence
Red=Cloning site Green=Tags(s)

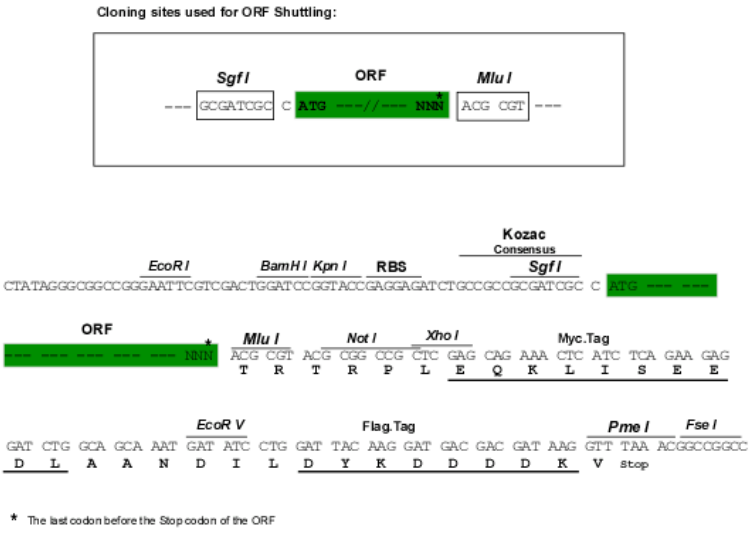
MPEMPEDMEQEEVNIPNRRVLVTGATGLLGRAVHKEFQQNNWHAVGCGFRRARPKFEQVNLLDSNAVHHI
IHDFQPHVIVHCAAERRPDVVENQPDAASQLNVDASGNLAKEAAAVGAFLIYISSDYVFDGTNPPYREED
IPAPLNLYGKTKLDGEKAVLENNLGAAVLRIPILYGEVEKLEESAVTVMFDKVQFSNKSANMDHWQQRFP
THVKDVATVCRQLAEKRMLDPSIKGTFHWSGNEQMTKYEMACAIADAFNLPSSHLRPITDSPVLGAQRPR
NTQLDCSKLETLGIGQRTPFRIGIKESLWPFLIDKRWRQTVFH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6079_f02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_182796

ORF Size: 969 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: NM_182796.2

RefSeq Size: 2293 bp

RefSeq ORF: 972 bp

Locus ID: 27430

UniProt ID: Q9NZL9

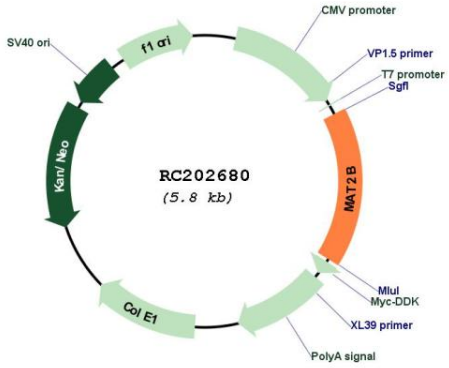
Cytogenetics: 5q34

Protein Pathways: Cysteine and methionine metabolism, Metabolic pathways, Selenoamino acid metabolism

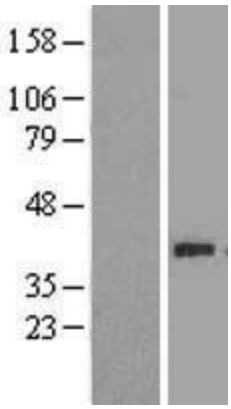
MW: 36.4 kDa

Gene Summary: The protein encoded by this gene belongs to the methionine adenosyltransferase (MAT) family. MAT catalyzes the biosynthesis of S-adenosylmethionine from methionine and ATP. This protein is the regulatory beta subunit of MAT. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Nov 2012]

Product images:



Circular map for RC202680



Western blot validation of overexpression lysate (Cat# [LY405360]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202680 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).