

Product datasheet for RC210589

MAT2B (NM_013283) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MAT2B (NM_013283) 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:	>RC210589 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTGGGGCGGGAGAAAGAGCTCTCTATACACTTTGTTCCCGGGAGCTGTCGGCTGGTGGAGGAGGAAG
TTAACATCCCTAATAGGAGGGTTCTGGTACTGGTGCCACTGGGCTTCTTGGCAGAGCTGTACACAAAGA
ATTTTCAGCAGAATAATTGGCATGCAGTTGGCTGTGGTTTCAGAAGAGCAAGACCAAATTTGAACAGGTT
AATCTGTTGGATTCTAATGCAGTTCATCACATCATTGATGATTTTCAGCCCCATGTTATAGTACATTGTG
CAGCAGAGAGAAGACCAGATGTTGTAGAAAATCAGCCAGATGCTGCCTCTCAACTTAATGTGGATGCTTC
TGGGAATTTAGCAAAGGAAGCAGCTGCTGTTGGAGCATTTCTCATCTACATTAGCTCAGATTATGATTT
GATGGAACAAATCCACCTTACAGAGAGGGAGACATACCAGCTCCCCTAAATTTGTATGGCAAAACAAAT
TAGATGGAGAAAAGGCTGTCTGGAGAACAATCTAGGAGCTGCTGTTTTGAGGATTCCTATTCTGTATGG
GGAAGTTGAAAAGCTCGAAGAAAGTGTGTGACTGTTATGTTTGAATAAGTGCAGTTCAGCAACAAGTCA
GCAAACATGGATCACTGGCAGCAGAGGTTCCCCACACATGTCAAAGATGTGGCCACTGTGTGCCGCAGC
TAGCAGAGAAGAGAATGCTGGATCCATCAATTAAGGGAACCTTCACTGGTCTGGCAATGAACAGATGAC
TAAGTATGAAATGGCATGTGCAATTGCAGATGCCTTCAACCTCCCAGCAGTCACCTAAGACCTATTACT
GACAGCCCTGTCTTAGGAGCACAACGTCGAGAAAATGCTCAGCTTGACTGCTCAAATTTGGAGACCTTGG
GCATTGGCCAACGAACCACTTTGCAATTGGAATCAAAGAATCACTTTGGCCTTTCTCATTGACAAGAG
ATGGAGACAAACGGTCTTTCAT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC210589 protein sequence
Red=Cloning site Green=Tags(s)

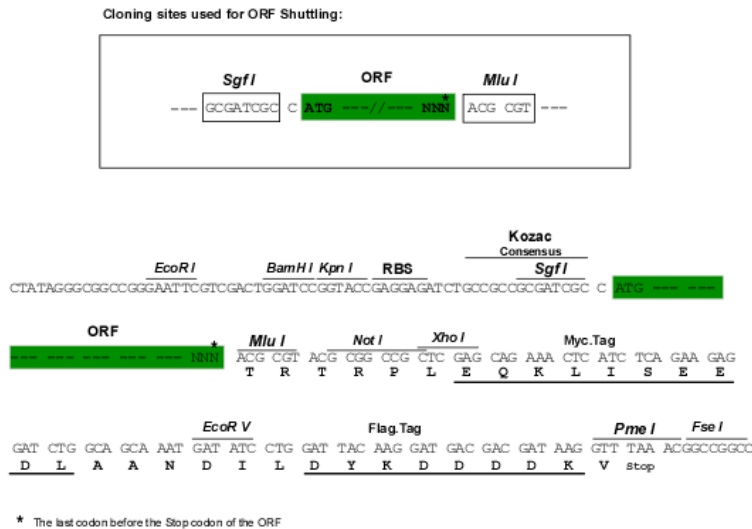
MVGREKELSIHFVPGSCLVEEEVNIPIPNRRVLVTGATGLLGRAVHKEFQQNNWHAVGCGFRRRPKFEQV
 NLLDSNAVHHIIHDFQPHVIVHCAAERRPDVVENQPDAAASQLNVDASGNLAKEAAAVGAFLLIYISSDYVF
 DGTNPPYREGDIPAPLNLYGKTKLDGEKAVLENNLGAAVLRIPILYGEVEKLEESAVTVMFDKVQFSNKS
 ANMDHWQQRFPTHVKDVATVCRQLAEKRMLDPSIKGTFHWSGNEQMTKYEMACAIADAFNLPSSHLRPIT
 DSPVLGAQRPRNAQLDCSKLETLGIGQRTPFRIKIGIKESLWPFLLDKRWRQTVFH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6133_e12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_013283

ORF Size: 1002 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_013283.5](#)

RefSeq Size: 2154 bp

RefSeq ORF: 1005 bp

Locus ID: 27430

UniProt ID: [Q9NZL9](#)

Cytogenetics: 5q34

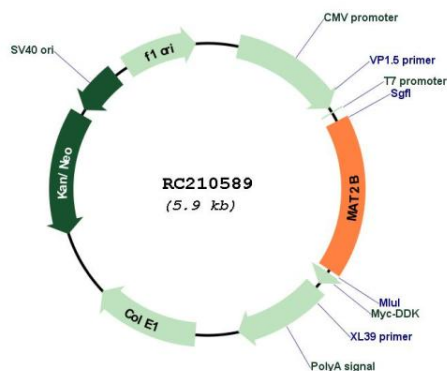
Domains: RmlD_sub_bind

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

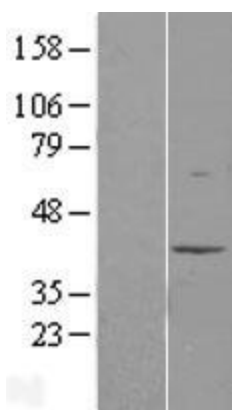
MW: 37.5 kDa

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]

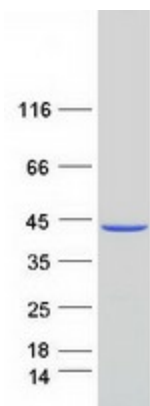
Product images:



Circular map for RC210589



Western blot validation of overexpression lysate (Cat# [LY402239]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210589 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MAT2B protein (Cat# [TP310589]). The protein was produced from HEK293T cells transfected with MAT2B cDNA clone (Cat# RC210589) using MegaTran 2.0 (Cat# [TT210002]).