

## Product datasheet for **RG210589**

### **MAT2B (NM\_013283) Human Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	MAT2B (NM_013283) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MAT2B
Synonyms:	MAT-II; MATIIBeta; Nbla02999; SDR23E1; TGR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG210589 representing NM_013283 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGTGGGGCGGGAGAAAGAGCTCTCTATACACTTTGTTCCCGGGAGCTGTCGGCTGGTGGAGGAGGAAG  
TTAACATCCCTAATAGGAGGGTTCTGGTACTGGTGCCACTGGGCTTCTTGGCAGAGCTGTACACAAAGA  
ATTTTCAGCAGAATAATTGGCATGCAGTTGGCTGTGGTTTCAGAAGAGCAAGACCAAATTTGAACAGGTT  
AATCTGTTGGATTCTAATGCAGTTCATCACATCATTCATGATTTTCAGCCCCATGTTATAGTACATTGTG  
CAGCAGAGAGAAGACCAGATGTTGTAGAAAATCAGCCAGATGCTGCCTCTCAACTTAATGTGGATGCTTC  
TGGGAATTTAGCAAAGGAAGCAGCTGCTGTTGGAGCATTTCTCATCTACATTAGCTCAGATTATGATTT  
GATGGAACAAATCCACCTTACAGAGAGGGAGACATACCAGCTCCCCTAAATTTGTATGGCAAAACAAAAT  
TAGATGGAGAAAAGGCTGTCTGGAGAACAATCTAGGAGCTGCTGTTTTGAGGATTCCTATTCTGTATGG  
GGAAGTTGAAAAGCTCGAAGAAAGTGTGTGACTGTTATGTTTGAATAAGTGCAGTTCAGCAACAAGTCA  
GCAAACATGGATCACTGGCAGCAGAGGTTCCCCACACATGTCAAAGATGTGGCCACTGTGTGCCGCGAGC  
TAGCAGAGAAGAGAATGCTGGATCCATCAATTAAGGGAACCTTCACTGGTCTGGCAATGAACAGATGAC  
TAAGTATGAAATGGCATGTGCAATTGCAGATGCCTTCAACCTCCCAGCAGTCACCTAAGACCTATTACT  
GACAGCCCTGTCTTAGGAGCACAACGTCCGAGAAATGCTCAGCTTGACTGCTCCAATTTGGAGACCTTGG  
GCATTGGCCAACGAACCACTTTTGAATGGAATCAAAGAATCACTTTGGCCTTTCTCATTGACAAGAG  
ATGGAGACAAACGGTCTTTCAT

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG210589 representing NM\_013283  
 Red=Cloning site Green=Tags(s)

MVGREKELSIHFVPGSCLVEEEVNIPNRRVLVTGATGLLGRAVHKEFQQNNWHAVGCGFRRARPKFEQV  
 NLLDSNAVHHIIHDFQPHVIVHCAAERRPDVVENQPDAAASQLNVDASGNLAKEAAAVGAFLLIYISSDYVF  
 DGTNPPYREGDIPAPLNLYGKTKLDGEKAVLENNLGAAVLRIPILYGEVEKLEESAVTVMFDKVQFSNKS  
 ANMDHWQQRFPTHVKDVATVCRQLAEKRM LDPSIKGTFHWSGNEQMTKYEMACAIADAFNLPSSHLRPIT  
 DSPVLGAQRPRNAQLDCSKLETLGIGQRTPFRIKIGESLWPFLIDKRWRQTVFH

TRTRPLE - GFP Tag - V

**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\\_013283.3](#), [NP\\_037415.1](#)

**RefSeq Size:** 2090 bp

**RefSeq ORF:** 1005 bp

**Locus ID:** 27430

**UniProt ID:** [Q9NZL9](#)

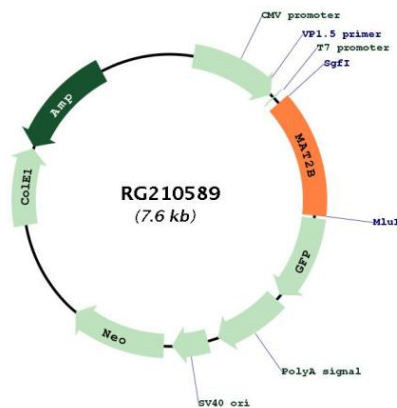
**Cytogenetics:** 5q34

**Domains:** RmlD\_sub\_bind

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

**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 RG210589