

## Product datasheet for **MG210560**

### Pat1 (NM\_172635) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Pat1 (NM_172635) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Pat1
Synonyms:	AV312086; Pat1b
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG210560 representing NM\_172635  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGTTCCGCTACGAGTCTTTGGAGGATTGCTCTAGATGAAGATGAAGATGCATTTCAAGCCCTGGGAG  
 AAGAAGATGAAGAAATTGATCAATTTAATGATGATACCTTTGGGTCAGGTGCAGTTGATGATGATTGGCA  
 GGAAGCACATGAGCGCCTGGCTGAGTTGGAAGAGAAGCTACCTGTGCAGCTGATGAACAAACAGGCAAT  
 GGAGAGAGAGATGAGATGGATTTGTTGGGTGACCATGAGGAGAATCTAGCAGAAAGGCTCAGTAAGATGG  
 TGATTGAAAATGAGCTAGAAGATCCAGCTATCATGAGGGCAGTACAGACCAGGCCAGTTTACAACCTCA  
 ACCAGGAAGTCTGAATCCAGCATCTGGGATGGATCTGAAGTTCTGAGGCGAATCCGTGGACCACTACTT  
 GCTCAGGAAATGCCTACAGTGTCTGTATTAGAGTATGCCTTGCCTCAGAGGCCCTGCAGGGCCAGAAG  
 ATGATCGGGACCTTTCTGAGCGAGCTTTACCAAGGCGGTCAACATCACCTATCATTGGAAGTCTCTCTGT  
 TAGAGCCGTTCTATAGGCACCCACCTAAGCAGATGGCTGTTCCAGCTTCAACCAACAGATCCTGTGT  
 CCGAAGCCTGTTTCATGTTTCGGCCCCAATGCCGCCACGCTATCCTGCTCCCTATGGCGAGAGGATATCTC  
 CAAACCAGCTCTGCAGTGTCCCGAACTCCTCCCTCCTGGGCCACCCTTTTCTCCTAATGTTCTCTCTGT  
 ACTTAGTCCCCTGCAGAGAGCACAGCTTCTTGGGGAGCACAGCTACAGCCTGGACGAATGTCTCCCAGC  
 CAGTTTGCACGGGTCCCTGGGTTTGTGGTAGCCCACTGGCTGCCATGAATCCTAAGTTGCTACAAGGGC  
 GCGTTGGGCAGATGCTTCCCCCAGCACCAAGCTTCCGTGCCTTCTTTAGTGTCCACCCCCGCTACGCC  
 ACCTCCACAGCAGCATCCCCCTGGCCCAGGACCTCACCTACAAAACCTCAGACCTCAGGCCCCAAATGTTT  
 AGAGCAGACACAACCTCACCTTCATCCACAGCACCGGCGCTGTTGCATCAGAGGCAGCTGCAGAGCAGAA  
 ATCAGCATCGGAATCTCAATGGTACTGGAGATAGAGGAGGGCACCAAGTCCAGTCAAGATCATCTCCG  
 GAAGGATCCATATGCTAATCTAATGTTGACGCGGAGAAGGATTGGGTCTCTAAAAATACAGATGATGCAG  
 CTGCAGAGCACTGATCCCTACCTGGATGATTTCTATTACCAAGTACTTTGAAAAACTGGAGAAATTGT  
 CAGCTGTGAGGAAATACAAGGTGATGGCCCTAAGAAGGAGCGTACCAAGCTCATCACCCCTCAGGTGGC  
 CAAACTGGAGCATGCTTATCAGCCTGTGCAGTTTGGGGCTCGTTGGGGAAGCTTACTGTCTTAGTGTG  
 AATAATCCTCGGAAGATGATAGATGCTGTTGTGACATCTCGAAGTGAGGATGATGAAACAAAAGAAAAAC  
 AAGTTCGGGATAAGAGAAGAAAAACCTTGTTATAATTGAGAAAACCTATAGTTTACTCCTTGATGTGGA  
 GGATTATGAAAGGCGCTATCTCCTAAGTCTAGAAGAAGAGCGGCCTGCCCTGATGGATGAAAGAAAGCAC  
 AAAATATGTAGCATGTATGACAACCTGAGGGGCAAATTGCCTGGACAAGAGAGGCCAAGTGTGACCACT  
 TTGTACAGATCATGTGTATCCGAAAAGGGAAGAGAATGTTGCCCCGATTCTCCCTTTCTCTCCACAGA  
 GCAAGCAGCTGACATTCTCATGGCAACTGCCAGGAACCTCCCTTTCTTATCAAGAAGGATGCCCAAGAT  
 GAGGTGCTGCCATGCTTACTGAGTCCCTTCTCTCTCTCTCTCTATCATCTTCTTCAAGTACTGTACCA  
 GCCTTCTGCAACAGCTAATGAACCTACCTCAGAGTGCAAGTGACCAGCGCCCTCCAACCTCACCTCAC  
 TGCTGTGCTCCAGAACAAGTTTGGCTTGTCACTGCTCCTAATCCTACTAAGCCGTGGAGAAGACCTACAG  
 AGTTCAGATCCTGCTATAGAATCAACGCAAAATAACCAGTGGACAGAGGTGATGTTTATGGCAACCCGAG  
 AACTTCTACGGATCCCCCAAGCTGCCCTGGCCAAACCAATCTCTATCCCTACAAATCTAGTGTCCCTTTT  
 TTCTCGCTATGTTGACCGGCAGAAACTGAACTTGTGGAACAAAACCTGCAGCTGGTTTCAGGGGATACGG

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG210560 representing NM\_172635  
 Red=Cloning site Green=Tags(s)

MFRYESLEDCPLDEDEDAFQGLGEEDEEIDQFNDDTFGSGAVDDDDWQEAHERLAELEEKLPVAADEQTN  
 GERDEMDLLGDHEENLAERLSKMVIENELEDPAIMRAVQTRPVLQPQPSLNSSIWDGSEVLRIRGPLL  
 AQEMPTVSVLEYALPQRPLQGPEDDRDLSERALPRRSTSPIIGSPPVRAVPIGTTPPKQMAVPSFNQILC  
 PKPVHVRPPMPPRYPAPYGERISPNQLCSVPNSSLLGHPFPNVPVLSPLQRAQLLGGALQPGRMSPS  
 QFARVPGFVGSPLAAMNPKLLQGRVQMLPPAPSFRAFFSAPPPATPPPQHPGPGPHLQNLRPQAPMF  
 RADTTHLHPQHRLLHQRLQSRNQHRNLNGTGDGRGGHQS HQDHLRKDPYANLMLQREKDWVSKIQQMMQ  
 LQSTDPYLLDDFYQNYFEKLEKLSAAEEIQGDGPKKERTKLITPQVAKLEHAYQPQVQFEGSLGKLTVSSV  
 NNPVKMIDAVVTSRSEDETKEKQVRDKRRKTLVIEKTYSLLLDVEDYERRYLLSLEEERPALMDERKH  
 KICSMYDNLRGKLPQERPSDDHFVQIMCIRKGRMVARILPFLSTEQAADILMATARNLPFLIKKDAQD  
 EVLPCLLSPFSLLLYHLPSVTVTSLQLQMLNLPQSASAPAPSNHSLTAVLQNKFGSLLLILLSRGEDLQ  
 SSDPAIESTQNNQWTEVMFMATRELLRIPQAALAKPISIPTNLVSLFSRYVDRQKLNLLLETKLQLVQGITR

TRTRPLE - GFP Tag - V

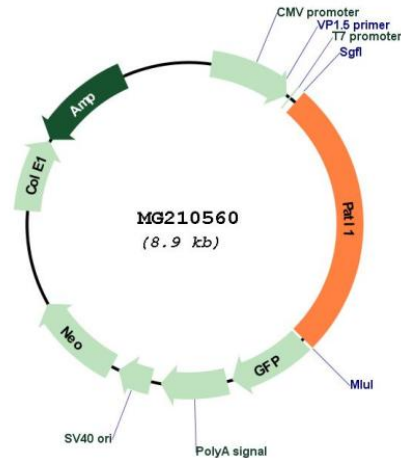
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM\_172635

ORF Size: 2310 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\\_172635.3](#), [NP\\_766223.2](#)

RefSeq Size: 4221 bp

RefSeq ORF: 2313 bp

Locus ID: 225929

UniProt ID: [Q3TC46](#)

Cytogenetics: 19 A

Gene Summary: RNA-binding protein involved in deadenylation-dependent decapping of mRNAs, leading to the degradation of mRNAs. Acts as a scaffold protein that connects deadenylation and decapping machinery. Required for cytoplasmic mRNA processing body (P-body) assembly (By similarity).[UniProtKB/Swiss-Prot Function]