

## Product datasheet for **MG210025**

### **Tbc1d23 (NM\_026254) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Tbc1d23 (NM_026254) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Tbc1d23
Synonyms:	4930451A13Rik; AU015720; AU043671; AU043778; D030022P07Rik; W51689
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide  
Sequence:**

>MG210025 representing NM\_026254  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCGGAAGGAGAAGAGCTTCTGCCACTGTCAACGTCGGCGGGGACAGCTGGGAAAAAGATCTTGAAG  
 AAGCCCTTGAAGCAGGAGTTGTGATCTTGAACTTTGAGAAATAAATTC AAGGGAGGCCACTGCCTGC  
 TGAGCTGAGGGCCAAGGTTTGAAGATTGCTCTGAACGTTGCAGGGAAAGGTGATAGTTTGGCATCATGG  
 GATGGTATTTTAGACTTGCCCTGAGCAGAACACTATT CATAAAGATTGCCTTGAGTTTATCGAGCAGCTCT  
 CAGTGCCAGAGGAGAAGGCAGCAGAATTACTCCTGGATATTGAATCTGTAATTACTTTTTACTGTAAATC  
 ACGCAGCGTTAAATACAGCACATCCCTGAGCTGGATT CACTACTGAAACCATTGATCTGTCTCCAGCTG  
 CCTCGCAGCGACCTATACAACTGCTTCTATGCCGTCATGAATAAGTACATTCCCAGGGATTGTTCCCTGA  
 AGGGGAGGCCATTT CATCTCTCCGGTTGCTCATCCAGTACCACGAGCCTGAGCTTTGTTCTTTTCTTGA  
 CACAAAGAAAATCACTCCAGACTCTATGCACTCAACTGGCTCGGGAGCCTTTTTGCACATTACTGTTCC  
 ACTGAGGTCACCCAGGCAATATGGGACGGATATCTACAGCAAGCGGACCGTTTTTTATTTATTTCTTAA  
 TGTTAATTATCCTTGTTAATACAAAAGAAGTTATTTTAGCACAAGAGTCTGACAGCAAAGAAGAAGTTAT  
 CCGCTTTTTGAAAGTACCCCGGCCAGCCTGAATCTGGAAGACATAGAAGACCTGTTCTCTTTGGCTCAG  
 TATTACTGTAGTAAGACGCCAGCTTCTTTTAGGAAGGTAACCATCATCTCTTCGGTAGCACCCCTGCTGG  
 GGATCAAGGACGACGAGGCAGATCTGAGCCAGGCTCTGTGTCTGGCTGTTTCAGTATCAGAGATCCTTCA  
 AGCTAATCAGCTGCAAGGGGAAGGAGTCCGTTCTTCGTGGTGGACTGCCGTCCTGCGGAGCAGTACAAT  
 GCTGGGCATTTGGCAACCGCTTCCACCTAGACTCAGACTTGATGCTCCAGAATCCATCTGAGTTTGCAC  
 AGTCAGTAAAGTCCTTGCTAGAAGCACAGAAACAGTCCATTGAGTCTGGCTCCATAGCAGGCGGGGAGCA  
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 TTAAGAAAAGTGGACATATGTTTCTAGCCATCTGCTGTTACCGCCACCCATATGTA CTGCTTAAGGGA  
 GATTCTTTCAAGGAAAGGCTGGCTTACATCCAGTCTCGGCAAGCACTAAATTCTGTAGTAAAAATTACG  
 TCCAAAAAAAACATCCCGAGCTAATTACCTTCAAGTATGGAAACAGCAGTGCTTCCGGGATAGAAATCT  
 TGGCTATTGAAAGGATTTGATTCCAAATGCAGGAGATGCTACCAGAGCCATAAAACAGCAGATCATGAA  
 AGTGTGGATGCTTTGAAAAGT

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG210025 representing NM\_026254  
 Red=Cloning site Green=Tags(s)

MAEGEELLPLSTSGGDSWEKDL EEAEAGGCDLETLRNIIQGRPLPAELRAKVVWKIALNVAGKGD SLASW  
 DGILDLPEQNTIHKDCLEFIEQLSVPEEKAAELLLDIESVITFYCKSRSVKYSTLSWIHLLKPLICLQL  
 PRSDLYNCFYAVMNKYIPRDCSLKGRPFHLFRLLIQYHEPELCSFLDTKKITPDSYALNWLGS LFAHYCS  
 TEVTQAIWDGYLQQADPFFIYFLMLIILVNTKEVILAQESDSKEEVIRFLESTPASLNLEDIEDLFS LAQ  
 YYCSKTPASF RKDNHHLFGSTLLGIKDDADLSQALCLAVSVSEILQANQLQGEGRVFFVVD CRPAEQYN  
 AGHLATAFHLDSDLMLQNPSEFAQSVKSLLEAQKQSIESGSIAGGEHL CFMGS GREEDMYMNMVLAHFL  
 QKNKEYVSIASGGF MALQQHLADINVEGPESGYGHWIASTSGSRGSISSVDGESCNGSNDRGMKSLVSKM  
 TVALKTKSVTVREKVISFIENSSTPVDRHVSSSDRVGKPYRGVKPVFSIGDEE EYDTEIDSSMSDDDR  
 KEVVNIQTWINKPDIKHHFPCKEVKESGHMFPSHLLVTATHMYCLREILSRKGLAYIQSRQALNSVVKIT  
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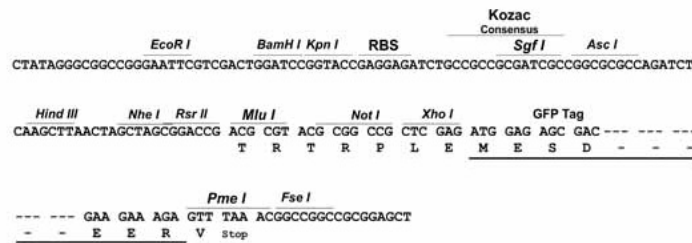
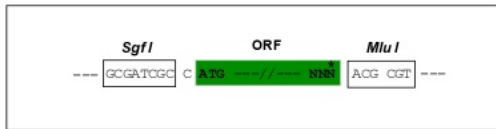
TRTRPLE - GFP Tag - V

**Restriction Sites:**

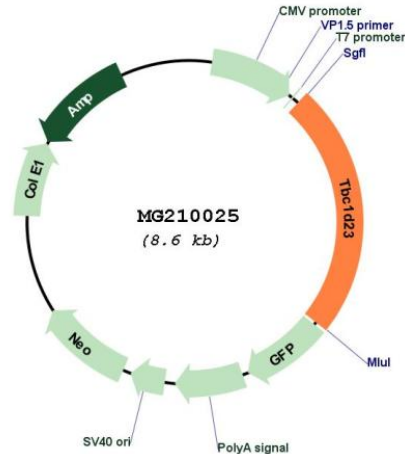
Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



## Plasmid Map:



ACCN: NM\_026254

ORF Size: 2052 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\\_026254.2](#), [NP\\_080530.2](#)

RefSeq Size: 3664 bp

RefSeq ORF: 2055 bp

Locus ID: 67581

UniProt ID: [Q8K0F1](#)

Cytogenetics: 16 C1.1

**Gene Summary:** Putative Rab GTPase-activating protein which plays a role in vesicular trafficking. Involved in endosome-to-Golgi trafficking. Acts as a bridging protein by binding simultaneously to golgins, including GOLGA1 and GOLGA4, located at the trans-Golgi, and to the WASH complex, located on endosome-derived vesicles (PubMed:29084197). Together with WDR11 complex facilitates the golgin-mediated capture of vesicles generated using AP-1 (By similarity). Plays a role in brain development, including in cortical neuron positioning. May also be important for neurite outgrowth, possibly through its involvement in membrane trafficking and cargo delivery, 2 processes which are essential for axonal and dendritic growth (PubMed:28823707). May act as a general inhibitor of innate immunity signaling, strongly inhibiting multiple TLR and dectin/CLEC7A-signaling pathways. Does not alter initial activation events, but instead affects maintenance of inflammatory gene expression several hours after bacterial lipopolysaccharide (LPS) challenge (PubMed:22312129).[UniProtKB/Swiss-Prot Function]