

## Product datasheet for **RC206651**

### **TBC1D21 (NM\_153356) Human Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	TBC1D21 (NM_153356) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TBC1D21
Synonyms:	MgcRabGAP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC206651 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGCATCGCC**

ATGACCACCTCTCTCCTGAAAACAGCCTCTCTGCCAGACAGTCAGCCTCCTTCATCCTGGTGAAGAGAA  
AACCAACCATTGACAAGACAGAATGGGACAGCTTCTTTGATGAGAGTGGCACTTGGCCAAATCACGGGA  
CTTCATTTGTGTTAACATCCTGGAAGGGGCTGCACCCCTTCGTGAGGACTGAAGCCTGGAATTCCTC  
ACGGGCTACTTCTCATGGCAGAGTCCCAGGATGAGCGGCTCACGGTGGACAGCATGAGGAGGAAGAACT  
ACAAGGCCTTATGCCAAATGTATGAGAAGATTCAGCCCTTCTGAAAACCTGCACCGGAACTTCACAGA  
GACTCGCAATAACATTGCACGTGACATTAGAAAATCTATGACAAAGATCCCCTGGCAACGTCCTCATC  
GACAAGAAGAGGCTAGAGAAGATCTTGCTCCTGAGTTACGCTCTGCAACACGCAGGAGGAGTACCAGCAGG  
GCTTCCATGAGATGATGATGCTCTTCCAGCTGATGGTGGAGCACGACCACGAGACCTTCTGGCTTTTCCA  
GTTCTTCTGCAGAAAACGGAACACAGCTGTGTCAACATTGGCGTGGCCAAGAACCTAGACATGCTC  
AGCACCTGATCACCTTCTGGACCCCGTGTGCTGAGCACCTAAAAGGGAAGGGTGCAGGGGCTGTGC  
AGTCCCTCTCCCTGGTCTGCTTCTGCTTCCAGCGTGCCTCAAGTCTTCGATGATGCTGGAGGCT  
CTGGGAGGTTCTGCTGACGGGGAAGCCCTGCAGAACTTCCAGGTGCTGGTGGCTACAGCATGCTGCAG  
ATGGTGCAGGAGCAGGTGCTGCAGGAAAGCATGGGCGGGGATGACATCCTTGGCCTGCAACAACCTCA  
TCGACCTTGATGCTGATGAGCTGATCTCTGCCGCTGCGTGGTTATGCTGAGCTCATCCAGAAGGATGT  
TCCTCAGACATTAAGGATTTCTCCTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC206651 protein sequence  
Red=Cloning site Green=Tags(s)

MTTLPENSL SARQSASFILV KRKPPIDKTEWDSFFDESGLAKSRDFICVNILERGLHPFVRTEAWKFL  
 TGYFSWQSSQDERLTVDSMRKKNYKALCQMYEKIQPLENLHRNFTETRNNIARDIQKIYDKDPLGNVLI  
 DKKRLEKILLLSYVCNTQAEYQQGFHEMMMLFQLMVEHDHETFWLFQFFLQKTEHSCVINIGVAKNLDML  
 STLITFLDPVFAEHLKGGAGAVQSLFPWF CFCFQRAFKSFDDVWRLWEVLLTGKPCRNFQVLVAYSMLQ  
 MVREQVLQESMGDDILLACNNLIDLDADELISAACVVYAELIQKDVPQTLKDFFL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6520\\_b05.zip](https://cdn.origene.com/chromatograms/mk6520_b05.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_153356

**ORF Size:** 1008 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\\_153356.1](#), [NP\\_699187.1](#)

**RefSeq Size:** 1259 bp

**RefSeq ORF:** 1011 bp

**Locus ID:** 161514

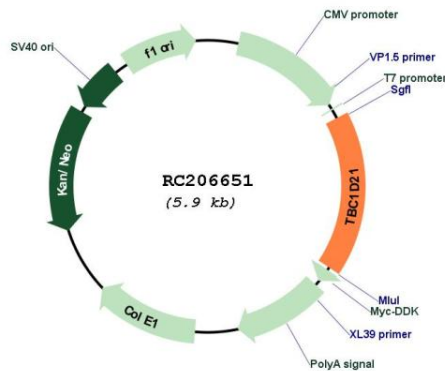
**UniProt ID:** [Q8IYX1](#)

**Cytogenetics:** 15q24.1

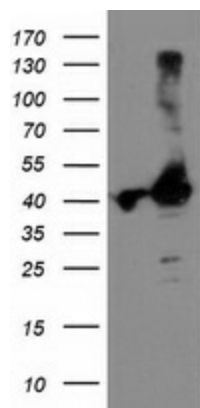
**MW:** 39.2 kDa

**Gene Summary:** May act as a GTPase-activating protein for Rab family protein(s) (PubMed:19077034). May be involved in acrosome formation and cytoskeletal reorganization during spermiogenesis, possibly by regulating RAB3A activity (PubMed:21128978).[UniProtKB/Swiss-Prot Function]

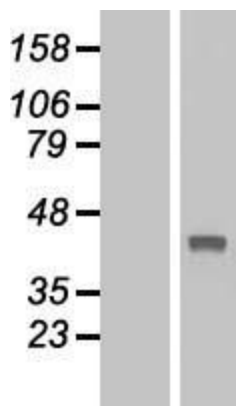
**Product images:**



Circular map for RC206651



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY TBC1D21 (Cat# RC206651, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-TBC1D21 (Cat# [TA503671]). Positive lysates [LY407069] (100ug) and [LC407069] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY407069]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206651 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).