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Product datasheet for MR231232

Tbc1d5 (NM_001285991) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tbc1d5 (NM_001285991) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Tbc1d5
Synonyms:	1600014N05Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

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ORF Nucleotide Sequence:

>MR231232 representing NM_001285991
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTATAAGTCTGTGTCTGAAACGAGACATCCTCTGCAGTCAGAAGAACAAGAAGTAGGCATTGACCCCT
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TCTATATCCGAGATGCTTTGATTTCTAGTAACTATCAGACCTGTCTTGGCCTTCTGATGCATTATCCAAT
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CCCCACTGCTGTTCTCAGACCCACTGATGGGCCCAGCCTCAGCCTCAGCCTCCTCCAGCAACCCCAGCTC
CAGCCCCGATGATGACAGCAGCAAGGAGTCTGGCTTCACCATTGTGAGCCCCTTGGACATC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
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Protein Sequence:

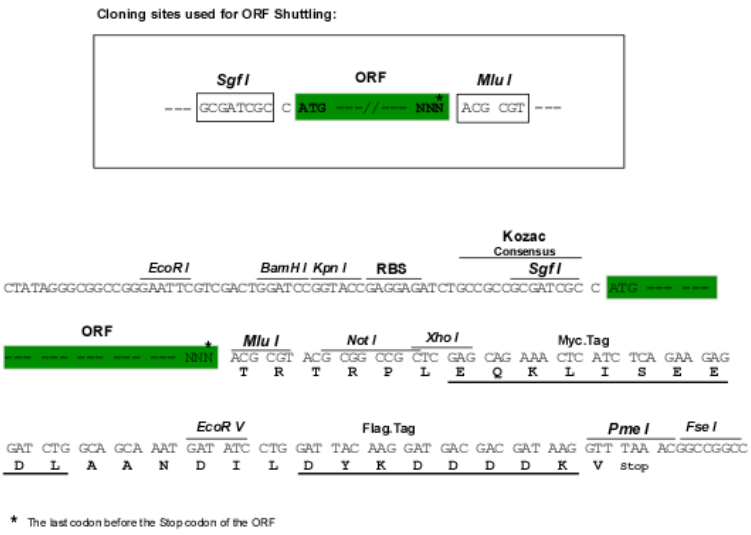
>MR231232 representing NM_001285991
Red=Cloning site Green=Tags(s)

MYKSVSETRHPLQSEEQEVGIDPLFSYSNKTRGDLSQNGRGSNSTLDTEGTFNSYMKEWEELFVNNNYLA
TVRQKGINGQLRSSRFRSICWKLFLCVLPQDKSQWISKIKELRAWYSSIKEIHITNPRKAAGQQDLMINN
PLSQDEGSLWNKFFQDKELRSMIEQDVKRTFPEMQFFQQENVRKILTDVLFCYARENEQLLYKQGMHELL
APIIFTLHCDHQAFLHASESAQPSEEMKTLLNPEYLEHDAYAMFSQLMETAEPWFSTFEHDGQKGKETLM
APIPFARPQDLGPTVAIVTKVNQIQDHLLKKHDIELYMHLNRLEIAPQIYGLRWVRLLFGREFPLQDLLV
VWDALFADSLNLSLVDYVFTAMLLYIRDALISSNYQTCLGLLMHYPIIGDIHSLILKALFLRDPKRNPRP
ATYQFHPNLDYYKARGADLMNKSRTNARGAPLNIHKVSNSLINFGRKLISPASAPGSMGGPVPGNNSSSS
FSAAIPTRTSTEAPRHHLLQQQQQQQHQQQQQQQPQQQQQQHQQQQQQQRLMKSESMPVQLNKGDVVTGS
DAQVSVPVQALTDLQGQSSKTISSSPSIESLPGGREFTGSPPPSATKKDSFFSNIARSRSHSKTMGRKES
EEELEAQISFLQGQLNDLDAMCKYCAKVMDMHLVNIQDVVLQENLEKEDQILVSLAGLKQIKDILKGSLR
FNQSQLEAGENEQITIADDHYCSSGQDQGSQVPRAAKQASSEMPGCTGGTTPDDFILVSKEDEGHRARGA
FSGQAQPLLTLRSTSGKSRAPACSPLLFSDPLMGPASASASSSNPSSSPDDDSSKESGFTIVSPLDI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001285991

ORF Size: 2511 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_001285991.1, NP_001272920.1

RefSeq Size: 5682 bp

RefSeq ORF: 2514 bp

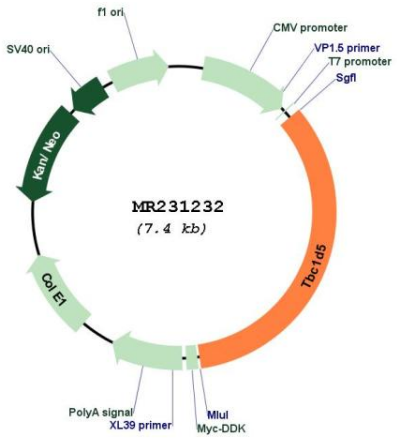
Locus ID: 72238

Cytogenetics: 17 C

MW: 94.5 kDa

Gene Summary: May act as a GTPase-activating protein for Rab family protein(s). May act as a GAP for RAB7A. Can displace RAB7A and retromer CSC subcomplex from the endosomal membrane to the cytosol; at least retromer displacement seems to require its catalytic activity. Required for retrograde transport of cargo proteins from endosomes to the trans-Golgi network (TGN); the function seems to require its catalytic activity. Involved in regulation of autophagy. May act as a molecular switch between endosomal and autophagosomal transport and is involved in reprogramming vesicle trafficking upon autophagy induction. Involved in the trafficking of ATG9A upon activation of autophagy. May regulate the recruitment of ATG9A-AP2-containing vesicles to autophagic membranes (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR231232