

Product datasheet for **MG210279**

Bbs2 (NM_026116) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Bbs2 (NM_026116) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Bbs2
Synonyms:	2410125H22Rik; AI447581
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide
Sequence:

>MG210279 representing NM_026116
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCTGCTGCCTGTGTTCACTCTGAAACTGCGCCACAAAATCAGCCCCGCATGGTGGCCATAGGGCGCT
ACGACGGGACTCACCCGTGCTTGGCTGCCGCCACCCAAGCGGGCAAGTTTTTCATTACATAACCCTCACAC
GCGGAGCCAGCATTTCAGTGCTTCCAGAGTGTTCCAGAGCCCTCTGGAGTCTGATGTCTCTCTGCTCAAC
ATTAACCAGACGGTCAGCTGCCTGGGTTCCGGGAGTCTTGAACCTGAGCTTGGCTATGATACTCTTTTAG
TGGGGACACAGACCAGTCTTTGGCTTACGACATCTACAATAATTCAGATTTGTTCTACAGAGAGGTCTC
AGATGGGGCAAATGCCATTGTGCTGGGGACCCTGGGAGACATTGCCCCACCTCTTGAATCATCGGTGGA
AACTGTGCTCTGCAGGGTTTCGATCACGAAGGAAATGATCTCTTTGGACGGTACTGGAGACAATGTGC
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CATTTCAGTTTTTAAAGAAGATGAGATTGTGCCAGAAATGACAGAGACAGAGATAGTCACCTCTCTGTGT
CCTATGTATGGCAGTCGGTTTGGTTACGCCCTTCCAATGGCACAGTTGGAGTTTATGACAAAACAGCCC
GGTACTGGAGGATTAATCCAAAACCATGCCATGAGCATCCATGCTTTTGACATTAATTCTGATGGAGT
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TGGCATGCGGAATTAGGCATTTCCAATTCCAATGATACTATCATCCGAGCAGTACTAATTTTTGCAGAG
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AGCAATCCAAAGAGCAGGCCGTCTGCGCGTTGGAAAGCCAAAGAACCAGGTGATCAGTGTGTCGGGAT
GCGATTCGAAGCAACAACATCAACACCTCTTCAGAATCATGCGAGTGGGCACTGCTCCTTCA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG210279 representing NM_026116
 Red=Cloning site Green=Tags(s)

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  MLLPVFTLKL RHKISPRMVAIGRYDGHPC LAAATQAGKVF IHNPHTRSQHFSASRVFQSPLESDVSL LN
  INQTVSCLGSGV LNPELGYDTLLVGTQTSLLAYDIYNNSDLFYREVS DGANAIVLGTLGDIAPPLAIIGG
  NCALQGF DHEGNDLFWTVTGDNVHSLALCDFDGDGKTELLV GSEDFDIRVFKEDI VAEMTETEIVTSLC
  PMYGSRFGYAL SNGTVGVYDKTARYWRIKSKNHAMSIHAFDINS DGVCELI TGWSNGKVDARS DRTGEVI
  FKDNFSSAVAGVVEGDYRMDGHVQLICCSVDGEIRGYLPGTAEMKGNLLDTSVEQDLIRELSQKKQNL LL
  ELRNYEESTKAELSSPLNEADGQKGIIPANTRLHTALSVNMGNDLQDAHAELGISTSNDTIIRAVLIFAE
  GIFV GESHVVHPSIHNLS SSSLRVPITPPKDV PVDLHLKTFVGYRSSTQFHVFELTRQLPRFTMYALTSPD
  AAEPVSYVNF SVAERTQRMVTLNQN FLLPEDSNVQNSPFHVCFTSLRNGGQLYIKMKQSGEITVNTDD
  IDLAGDIIQSIASF FAIEDLQVEADFPVYFEELRKVLVKVDEYH SVHQKLSADMADNSNLIRSLLVRAED
  ARLMRDMKTMKSR YMELYDLNKDLLNGYKIRCNNHTELLGNLKA VNOAIQRAGRLRVGPKNQVISACRD
  AIRSNNINTLFRIMRVGTAPS
  
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TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN: NM_026116

ORF Size: 2163 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_026116.2](#), [NP_080392.1](#)

RefSeq Size: 2972 bp

RefSeq ORF: 2166 bp

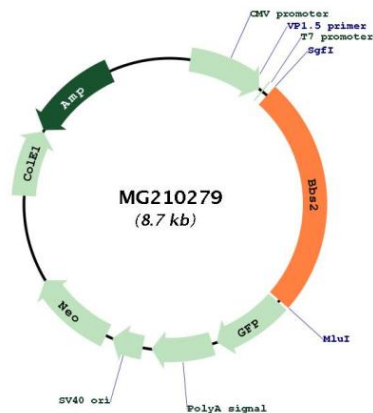
Locus ID: 67378

UniProt ID: [Q9CWF6](#)

Cytogenetics: 8 C5

Gene Summary: The BBSome complex is thought to function as a coat complex required for sorting of specific membrane proteins to the primary cilia. The BBSome complex is required for ciliogenesis but is dispensable for centriolar satellite function. This ciliogenic function is mediated in part by the Rab8 GDP/GTP exchange factor, which localizes to the basal body and contacts the BBSome. Rab8(GTP) enters the primary cilium and promotes extension of the ciliary membrane. Firstly the BBSome associates with the ciliary membrane and binds to RAB3IP/Rabin8, the guanosyl exchange factor (GEF) for Rab8 and then the Rab8-GTP localizes to the cilium and promotes docking and fusion of carrier vesicles to the base of the ciliary membrane. The BBSome complex, together with the LTZL1, controls SMO ciliary trafficking and contributes to the sonic hedgehog (SHH) pathway regulation. Required for proper BBSome complex assembly and its ciliary localization (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG210279