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Product datasheet for MR210222

Bbs7 (NM_027810) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Bbs7 (NM_027810) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Bbs7
Synonyms:	8430406N16Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR210222 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGATCTGACGTTAAGCCGGGCAGACTACCTCCAGGTCGGAGTGACCTCTCAGAAAACTATGAAGTTGC
TTCCTACCTCAAGACAAAGGGCTACACAAAAGGTGGTTGTTGGAGATCAAGATGGGGTAGTGATATGCTT
CGGCGTGAAGAAAGGAGAAGCTGTGCCAGTGTTCAAGACTTTACCAGGGCAGAAGATCTCGAGGCTGGAA
CTAGGAGGGGCCGTCAACACGCCTCAGGAGAAAATCTTCATTGCTGCAGGGTCCGAGATTAGAGGCTTTA
CAAAGAGAGGGAAACAGTTTCTCTCTTTTGAAACTAACCTCACGGAAAGCATTAAAGCTATGTACATATC
TGGCTCTGACCTCTTCCTCAGTGCAAGCTACATCTATAATCACTACTGTGATTGCAAAGACCAAAATTAT
TACCTTTCTGGGGACAAAATCAATGATGTCATCTGCCTTCCTGTGGAAAAGTTATCTCGCGTGACACCGG
TGTTGGCCTGCCAGGACCGGGTGCTCCGAGTCTTACAGGGATCTGATGTGATGTATGAAATTGAGGTTCC
TGGTCCACCCACCGTCTTAGCACTGCATAATGGAGATGGAGGTGACTCTGGAGAAGGACTTCTGTTCGGC
ACATCAGATGGAAGACTTGGGCTTATTCAGATCACAACATCCAAACCAATACACAAATGGGAAATTCGAA
ATGACAAAAAGCGGGGAGGTATCTTGTGTGTTGACAGCTTTGATATCATGGGTGATGGGGTTAAAGATTT
ACTTGTTGGGAGAGATGATGGAATGGTGGAAGTATATAGTTTTGAAAATGCAAATGAACCTGTGCTACGA
TTTGATCAGATGCTGTCTGAAAGCGTCACCTCCATCCAGGGTGGCTGTGTGGGAAAAGATGGCTATGATG
AAATCGTGCTGGCCACATATTCAGGCTGGGTGACAGGGCTGACTACAGAGCCAACTCATAAAGAGAGTGG
ACCAGGAGAAGAACTAAAACTTAATCAGGAGATGCAGAATAAGATTTCTTCTTTAAGGTCTGAAATAGAA
CACCTGCAGTTTAAGGTGCTTCAGGAGAGAGAAAATTACCAACAGTCTTCACAGTCAAGCCAAGCAAAGT
CAACAGTCCCTTCATTCAGTATAAATGACAAGTTCACGTTGAATAAAGAAGATGCTAGCTACAGCCTCGT
CTTAGAGGTGCGGACTGCAATAGACAATGTCCTAATACAGAGTGATGTTCCAATAGATCTACTTGATGTG
GACAAGAATTCTGCTGTTGTGAGCTTCAGCAGCTGTGACACAGAGTCAAACGACAACTTTCTTCTTGCTA
CTTATCGGTGCCAGGCAAATACCACCAGGCTGGAGCTCAAGATTCGTTCAATTGAAGGCCAGTATGGCAC
ACTCCAGGCATATGTGACTCCAAGAATCCAACCAAAAACCTGTCAGGTTCGCCAATACCACATCAAACCT
CTATCACTCCATCAAAGAACTCACTTTATTGACCATGACAGGCCTATGAACACACTGACTCTAACAGGCC
AGTTCAGCTTTGCTGAAGTTCACTCCTGGGTGGTGTTCTGCCTGCCTGAAGTTCCTGAAAAGCCTCCAGC
AGGGGAATGTGCAACATTTTACTTTCAGAATACCTTTCTGGATACACAACTTGAGTGTGTATACAGGAAA
GGAGAAGGAGTTTTTAAATCTGACAACATTTCTACAATATCCATCCTAAAAGATGTGCTTTCTAAAGAAG
CTACAAAAAGGAAAATTAATCTCAACATATCATACGAGATAAACGAGGTGTCTGTCAAGCACACTTTAAA
GCTAATTCACCCGAAGCTGGAGTATCAGCTGCTTCTGGCTAAGAAAGTGCAGTTAATCGATGCCCTGAAG
GAATTGCAGGTTCATGAGGGAAATACAGACTTTCTGACTCCAGAGTACCGATGTATTCTAGAAGAGGCAG
ATCATCTACAAGAGGAATACAAAAAGCAGCCTGCACATCTTGAAAGACTCTATGGTATGATTACTGATCT
TTTTATAGATAAATTTAAGTTCAAAGGCACTAATGTAAAAACCAAAGTACCCATGCTCCTGGAGATTCTC
GACAGCTACGACCAGAACACACTGATTTCTTTCTTCGATGCAGCA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

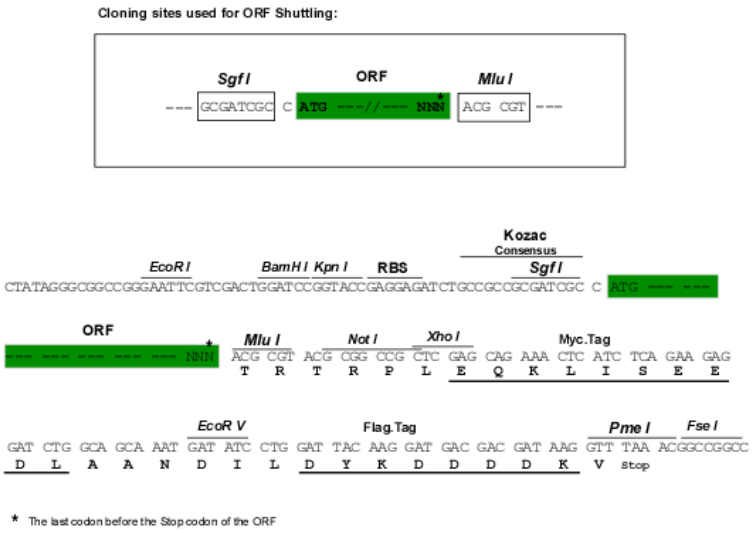
>MR210222 protein sequence
Red=Cloning site Green=Tags(s)

MDLTLSRADYLQVGVTSQKTMKLLPTSRQRATQKVVVGDQDGVVICFGVKKGEAVPVFKTLPGQKISRLE
LGGAVNTPQEKIFIAAGSEIRGFTKRGKQFLSFETNLTESIKAMYISGSDLFLSASYIYNHYCDCKDQNY
YLSGDKINDVICLPVEKLSRVTPVLACQDRVLRVLQGSDVMYEIEVPGPPTVLALHNGDGGDSGEGLLFG
TSDGRLGLIQITTSKPIHKWEIRNDKKRGGILCVDSFDIMGDGVKDLLVGRDDGMVEVYSFENANEPVLR
FDQMLSESVTSIQGGCVGKDGYDEIVLATYSGWVTGLTTEPTHKESGPGEELKLNQEMQNKISSLRSEIE
HLQFKVLQERENYQQSSQSSQAKSTVPSFSINDKFTLNKEDASYSLVLEVRTAIDNVLIQSDVPIDLLDV
DKNSAVVSFSSCDTESNDNFLLATYRCQANTTRLELKIRSIEGQYGTLQAYVTPRIQPKTCQVRQYHIKP
LSLHQRTHFIDHDRPMNTLTLTGQFSFAEVHSWVVFCLPEVPEKPPAGECATFYFQNTFLDTQLECVYRK
GEGVFKSDNISTISILKDVLSKEATKRKINLNISYEINEVSVKHTLKLIHPKLEYQLLLAKKVQLIDALK
ELQVHEGNTDFLTPEYRCILEEADHLQEEYKKQPAHLERLYGMITDLFIDKFKFKGTNVKTKVPMLLEIL
DSYDQNTLISFFDAA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_027810

ORF Size: 2148 bp

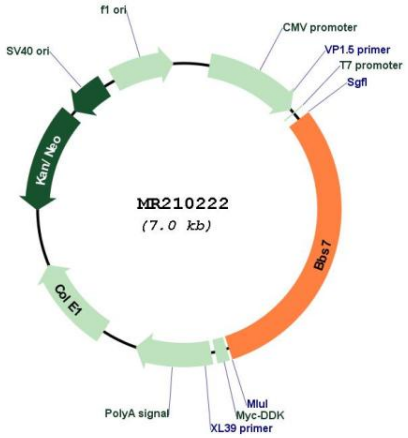
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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_027810.1, NM_027810.2, NM_027810.3, NP_082086.1
RefSeq Size:	2598 bp
RefSeq ORF:	2148 bp
Locus ID:	71492
UniProt ID:	Q8K2G4
Cytogenetics:	3 B
MW:	80.3 kDa
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 BBSome complex ciliary localization but not for the proper complex assembly (By similarity). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR210222