

## Product datasheet for **MC217495**

### **Bbs4 (NM\_175325) Mouse Untagged Clone**

#### **Product data:**

|                    |                                       |
|--------------------|---------------------------------------|
| Product Type:      | Expression Plasmids                   |
| Product Name:      | Bbs4 (NM_175325) Mouse Untagged Clone |
| Tag:               | Tag Free                              |
| Symbol:            | Bbs4                                  |
| Synonyms:          | AW537059; AW742241; D9Ertd464e        |
| Vector:            | pCMV6-Entry (PS100001)                |
| E. coli Selection: | Kanamycin (25 ug/mL)                  |
| Cell Selection:    | Neomycin                              |



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**Fully Sequenced ORF:** >MC217495 representing NM\_175325  
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGGCTGAAGTGAAGCTTGGGATGAAAACCTCAGGTTCTGCATCTGTTGAATCTCAAAAACCTAGGTCAA  
AAAAAGCTCCAGACTTCCCTATTGTGGAGAAACAGAAGCTGGCTGATCCATCTCCACTATATCCGGAAGGA  
TTATGAAGCTTGAAGGCTGTGATCAAAGAACAGCTTCAGGAGACTCAGGGGCTATGTGAATATGCTATC  
TATGTCCAAGCACTGATTTTTCGCCTGGAAGAAATATCCAAGAATCCCTAGAACTCTTTCAGACATGTG  
CTGTTCTCAGCCACAGTGTGCTGATAATCTCAAGCAGGTGGCCAGATCTTTGTTTCTTCTGGGAAAACA  
CAAAGTCCACTGAAGTATATAATGAAGCAGTAAACTTAACCAGAAAGACTGGGAGATCTGCCATAAC  
CTGGGAGTGTGCTACACTACCTGAAGCAGTCAACAAGGCACAAGACCAACTGCACAGTGCCTCCAGC  
TTAACAAGCATGACCTGACTTACATAATGTTGGGAAGATCCATTTACTGCAGGGAGACCTGGATAAAGC  
CATCGAGATCTACAAGAAAGCAGTAGAGTTCTCACCAGAAAATACTGAACTTCTTACAACTTTAGGATTG  
CTCTACTTGCAGCTTGGTGTGTACCAGAAGGCATTTGAACATCTTGGGAATGCAGTACCTACGACCTG  
CCAACACAAGGCCATCTTGGCAGCAGGCAGCATGATGCAGACTCATGGGACTTTGATGTGCSCCTTAC  
CAAATACAGAGTTGTAGCCTGTGCTATTCCAGAAAGTCCCTCCACTTTGGAATAACATTGGAATGTGTTTC  
TTTGGCAAGAAGAAATATGTGGCAGCTATCAGTGCCTAAAACGAGCCAACTACTTGGCACCCCTTCGACT  
GGAAGATTCTGTACAACCTGGGCCTTGCCATTTGACTATGCAGCAGTATGCATCAGCATTCCATTTTCT  
CAGTGCAGCCATCAACTCCAGCCAAAGATGGGGAACTCTACATGCTCTTGGCTGTGGCTTGACCAAC  
CTGGAAGATATAGAGAATGCCAGAAGAGCTTATGTAGAAGCTGTCGCCCTGGATAAGTGTAAACCCTTAG  
TAAACCTGAACTATGCTGTGCTGTATAAACCAGGGTGAGAAGAAGAGCCCTGGCTCAGTACAGGGA  
GATGGAGAAGAAGGTCAACTTTCTCAAGGACAACAGCCCTCTGGAATTTGACTCTGAGATGGTAGAGATG  
GCTCAGAAGTTGGGAGCTGCCCTTCAGGTGGGAGAGGCACTGGTCTGGACCAAACAGTCAAAGATCCCA  
AGACAAAGCACCGGACCAATTCAGGCAGCAAATCTGCTACTCTCCAGCAGCCTCTGGTTCCATTCAAGC  
TCTAGGACAGGCGATGTCTTCAGCAGCTGCATACAGAAAGATCCTTTCAGGTGCTGTAGGAGCCAGCTC  
CCAAAGCCACCATCACTGCCACTGGAGCCAGAGCCAGAGCCCACTGTGGAAGCAAGTCCAACAGAAGCAT  
CAGAACAAAAGAAAGAAAAATAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** Sgfl-Mlul

**ACCN:** NM\_175325

**Insert Size:** 1563 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**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\\_175325.3](#), [NP\\_780534.1](#)

**RefSeq Size:** 2542 bp

**RefSeq ORF:** 1563 bp

**Locus ID:** 102774

**UniProt ID:** [Q8C1Z7](#)

**Cytogenetics:** 9 32.01 cM

**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 RAB31P/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. Required for microtubule anchoring at the centrosome but not for microtubule nucleation. May be required for the dynein-mediated transport of pericentriolar proteins to the centrosome (By similarity).[UniProtKB/Swiss-Prot Function]