

## Product datasheet for **RN205555**

### **Bbs2 (NM\_053618) Rat Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Bbs2 (NM_053618) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Bbs2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**Fully Sequenced ORF:** >RN205555 representing NM\_053618  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCTGCTGCCTGTGTTACCCCTGAAACTGCGCCACAAAATCAGCCCCGCATGGTGGCCATAGGGCGCT  
 ACGACGGGACTCACCCGTGCTTGGCGGCCGCCACCCAAGCGGGCAAGGTTTTTATTCATAATCCTCACAT  
 GCGGAGCCAGCATTTTAGTACATCCAGAGTGTTCCAGAGCCCTCTTGAGTCTGATGTGTCCTCCTCAAC  
 ATTAACCAGACAGTCAGCTGCCTCGCGCCGGAGTCTTGAACCCTGAGCTTGGCTATGATACTCTTTAG  
 TGGGGACACAGACCAGTCTTTGGCTTACGACATCTACAATAATTCAGATTTGTTCTACAGAGAGGTGCG  
 GGATGGGGCAAATGCCCTTGTGTTGGGGACTCTGGGGGACATTGCCCCGCCCTTGAATCATCGGTGGA  
 AATTGTGCTCTTCAGGGTTTTGATCACGAAGGAAATGACCTCTTTGGACGGTACTGGAGACAATGTT  
 ATTCTTGGCTCTGTGTACTTTGACGGTGATGGGAAGTCAGAGCTTCTGTTGGGTCTGAAGATTTTGA  
 CATTTCAGTTTTTAAAGAAGATGAGATTGTGCCAGAAATGACAGAGACAGAGATAGTCACCTCTCTGTGT  
 CCCATGTACGGCAGTCCGTTTGGTTATGCCCTTCTAATGGCACAGTTGGAGTTTATGACAAAACAGCCC  
 GGTACTGGAGAATTAATCCAAAACCATGCCATGAGCATCCATGCTTTTGACATCAATTCTGATGGAGT  
 GTGTGAATTGATCACTGGGTGGTCTAATGGGAAGGTTGACGCTCGCAGTGACCGGACCGGAGAGGTGATA  
 TTTAAAGACAACCTCTCTTCTGCCGTTGCTGGTGGTGGAGGGAGATTACCGGATGGATGGCCACGTAC  
 AGTTAATCTGCTGCTCAGTGGATGGGAAATCCGAGGCTACCTGCCAGGCACAGCTGAGATGAAGGGGAA  
 CCTCCTGGACACAAGTGTGGAGCAGGGCCTGATCCGAGAGCTCAGTCAGAAAAAGCAGAACCTGTTGCTA  
 GAAGTGGCAACTACGAGGAGAACCAAGGCAGAAGTGGAGTCCCTGATCAATCTGGGGAATGATGCACAAGA  
 AAGGCATAATCCAGCCAATACCAAGCTCCACACAGCCCTCTCAGTCAATCTGGGGAATGATGCACAAGA  
 CGCACATGCGGAATTACGCATTTCCACTTCTAATGACACAATCATCCGGGCAGTACTCATTTTTGCAGAG  
 GGAATTTTTGCGGGTGAAGCCAGTGGTCCACCCAGCACTCACAACCTTTCCAGCTCCATCCGGGTAC  
 CAATTACGCCTCCCAAAGATGTCCTGTGGATCTGCACTTGAACCTTTCGTGGTTACAGAAGCAGCAC  
 CCAGTTCATGTGTTGAACTGATAAGGCAGCTGCCAGATTTACCATGTATGCACTGACAAGCCCAGAC  
 GCAGCGAGCGAGCCTGTCAGTTTCGTGAACTTCATCGTAGTAGAGCGGGCACAGAGGATGGTCACGTGGC  
 TCAACCAGAACTCTTGTGCCAGAAGACAGTAACATTCAGAACGCCCGTTTTCAGTCTGTTTCACGTC  
 CTTACGCAACGGTGGCCAGCTCTACATAAAAATGAAACCAAGTGGTGGAGATCACGGTGAATACTGATGAT  
 ATTGATCTTGCTGGTATATCATCCAGTCGATGGCATCCTTTTTTGTATTGAAGACCTTCAGGTAGAAG  
 CAGATTTCCCTGTCTACTTCGAGGAGTTACGGAAAGTGCTGTTGAAGGTAGATGAGTACCATTTCAGTGCA  
 TCAAAAGCTCAGCGCAACATGGCTGATAATTCTAACCTCATCCGAAGTTTGTGGTCAGAGCGGAGGAT  
 GCTCGTCTGATGAGAGACATGAAAACAATGAAGACTCGTTATATGGAGCTCTATGACCTTAATAAAGATT  
 TGCTAAATGGATAAAGATTTCGTTGTAACAACCAACTGAACTGCTAGGAAACCTGAAGCGGGTGAACCA  
 AGCAATCCAGAGGGCAGGCCGTCTGCGAGTTGGAAAGCCAAAGAACCAGGTGATCAGTGTCTGTCGGGAT  
 GCGATTCGCAGTAACAACATCAACACACTCTTCAGAATCATGCGGGTGGGACTGCTCCTTCC**TAG**

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI

**ACCN:** NM\_053618

**Insert Size:** 2166 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).

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u><a href="#">NM_053618.1</a></u> , <u><a href="#">NP_446070.1</a></u>
<b>RefSeq Size:</b>	2573 bp
<b>RefSeq ORF:</b>	2166 bp
<b>Locus ID:</b>	113948
<b>UniProt ID:</b>	<u><a href="#">Q99MH9</a></u>
<b>Cytogenetics:</b>	19p12
<b>Gene Summary:</b>	<p>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]</p>