

Product datasheet for **RG205501**

BBS10 (NM_024685) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	BBS10
Synonyms:	C12orf58
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



ORF Nucleotide Sequence: >RG205501 representing NM_024685
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGTTAAGTTCTATGGCCGCTGCAGGGTCTGTGAAGGCGCGTTGCAGGTGGCCGAGGTGCTGGAAGCCA
 TCGTGAGCTGCTGCGTGGGGCCGAGGGACGGCAAGTTTGTGTACGAAGCCCACTGGCGAGGTGCTTCT
 CAGCCGGAATGGAGGCCGCTCCTGGAGGCGCTACACTAGAGCATCCCATAGCCAGGATGATAGTGGAC
 TGTGTTCCAGTCATCTCAAAAAACAGGAGATGGTGCAAAAAACATTTATTATCTTTCTTTGCCATTGCG
 TTAGAGGACTTCATGCAATCACAGACAGAGAAAAGGATCCTTTGATGTGTGAAAACATTCAAACCCATGG
 AAGGCATTGGAAAAATTGTTCTCGGTGGAATTTATTTCCAGGCTCTCCTAACGTTTCAGACACAAAATA
 TTAGACGCTATTATGGACCAGTACCTAAGTAGACACTTTTTGTCTATCTTTCTGCTGCTAAAGAGAGAA
 CATTGTGTAGGAGCTCTTAGAGTTGCTCTTAGAAGCATACTTTGTGGAAGAGTGGGAAGAAATATCA
 TAAATTTATTTACAGTTGATGTGTGACTACTTTTCAAGTGTATGACTTGTAAAAGTGGGATTGGTGT
 TTTGAGTTAGTGGATGACCATTTTGTAGAGTTGAATGTTGGTGTCACTGGCCTTCCTGTTTCAGATTCCA
 GGATCATAGCTGGTCTTGTGCTTCAGAAAGATTTTCTGTGTACCGCCAGCAGATGGTGACATGCGAAT
 GGTGATAGTAACAGAAACCATTCAGCCTCTTTTCCACTTCTGGATCAGAGTTTATTCTAAATTCAGAA
 GCACAGTTTCAGACATCTCAATTTTGGATTATGGAAGACAAAAGCAATAATGAAACATCTACATAGTC
 AGAATGTAAAATTGCTCATATCTAGTGTGAAACAACAGATTAGTTAGTTATTATGCAGGGGTGAATGG
 CATATCAGTGGTTGAGTGTATCATCAGAAGAAGTTCTCTTATCCGGAGGATCATTGGTCTTTCTCCA
 TTTGTACCACCACAGGCCCTTTTCGAGTGTGAAATACCTAACACTGCTTTGGTGAATTTTGTAAACCTC
 TTATCCTTAGATCCAAAAGATATGTTATCTAGGCTTGATAAGCACATGTGCATTTATACCACACTCTAT
 AGTTCTTTTGGACAGTGCATGGTCTCATTGAACAACATGAGGATGCTTACATGGAGCACTTAAATG
 CTTGCGCAATTATTTAAAGACCTTGATCTAAATTACATGACACAAACCAATGACCAAAATGGCACTTCAA
 GTCTTTTTATTTAAGAACAGTGGAGAAAGTTATCAAGCACCAGATCCGGGTAAATGGCTCAATACAAAG
 GCCTTATCAGGACACAGTTGCAGAGAACAAAGATGCATTGGAAAACTCAAACATATTTAAAGTACAT
 TCTAATTTGGTAATTCAGATGTAGAATTAGAAACATATATTCGGTATTCAACCCCACTGACACCAA
 CAGATACATTCCAAACAGTTGAAACGCTGACATGTTTGTCTTTGAAAGAAACAGGCTAACTGATTATTA
 TGAACCATTACTCAAGAACAATTCCTGCTTATTCAACAAGGGGAAATAGAAAGAAATTTCTTACGAA
 AATTTACAGGTACAAAATTTACTAGAAAGGGAAGCATGTTACCAGTGAGCTGTAAGTTACCGAATATGG
 GTACTTCCAGAGTTACCTTTCTCATCTATGCCAGCTGGTTGTGTTTGGCAGTAGGTGTTAATTTTGA
 TATCTTGTTACATTACTATCTTCTCAATTATGCCAAAAATGCCATCAATCAGAAGAAACCATGGTTAGT
 ATGATAATAGCTAATGCACTTTTAGGCATTCCTAAAGTCTTTATAATCTAAAACAGGAAAGTACAGCT
 TTCCACATACATATATAAGAGCTGTCCATGCACTGCAACCAATCAACCTTGGTAAGCAGTCAGACAGG
 TTTGGAATCAGTAATGGGTAATACAGCTACTAACTTCAGTTCTTCAGTGTGTTGACAAAAATATTAACC
 ATTGACATGGTAATCACTGTTAAGAGACACCTCAGAAAGTTCACAATCAAGATTTCAGAAGATGAAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

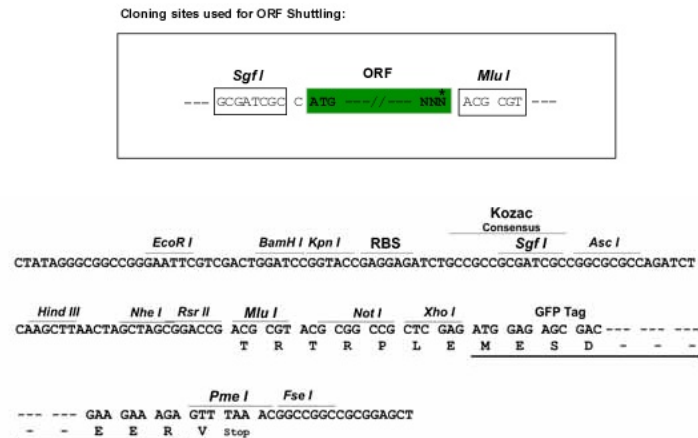
Protein Sequence: >RG205501 representing NM_024685
 Red=Cloning site Green=Tags(s)

MLSSMAAGSVKALQVAEVLEAIVSCCVGPEGRQVLCTKPTGEVLLSRNGRLLLEALHLEHPIARMIVD
 CVSSHLKKTGDGAKTFIIFLCHLLRGLHAITDREKDLPCENIQTHGRHWKNCNRWKFISQALLTFQTQI
 LDGIMDQYLSRHFLSIFSSAKERTLCRSSLELLLEAYFCGRVGRNNHKFISQLMCDYFFKCMTCCKSGIGV
 FELVDDHVELNVGVTGLPVSDSRIIAGLVQKDFSVYRPADGDMRMVIVTETIQPLFSTSGSEFILNSE
 AQFQTSQFWIMEKTKAIMKHLHSQNVKLLISSVKQPDLSVYAGVNGISVVECLSSEEVSLIRRIIGLSP
 FVPPQAFSQCEIPNTALVKFCKPLILRSKRYVHLGLISTCAFIPHSIVLCGPVHGLIEQHEDALHGALKM
 LRQLFKDLNLNYMTQNDQNGTSSLIYKNSGESYQAPDPGNGSIQRPYQDTVAENKDALEKTQTYLKVH
 SNLVIPDVELETYIPYSTPTLTPTDTFQTVETLTCLSLERNRLDYEPELLKNNSTAYSTRGNRIEISYE
 NLQVTNITRKGSMLPVSKLPNMGTSQSYLSSMPAGCVLPVGGNFDILLHYLLNYAKKCHQSEETMVS
 MIIANALLGIPKVLKSKTGKYSFPHYIRAVHALQTNQPLVSSQTGLESVMGKYQLLTSVLQCLTKILT
 IDMVITVKRHPQKVHNQDSEDEL

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_024685

ORF Size: 2169 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.

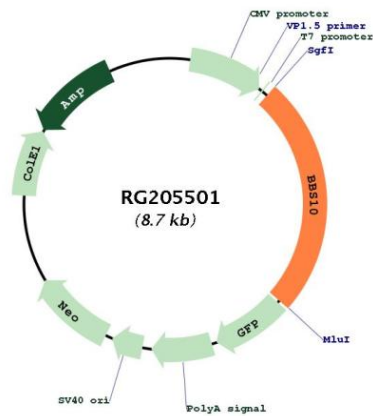
Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_024685.3](#), [NP_078961.3](#)

RefSeq Size: 3583 bp
 RefSeq ORF: 2172 bp
 Locus ID: 79738
 UniProt ID: [Q8TAM1](#)
 Cytogenetics: 12q21.2

Gene Summary: This gene is a member of the Bardet-Biedl syndrome (BBS) gene family. Bardet-Biedl syndrome is an autosomal recessive disorder characterized by progressive retinal degeneration, obesity, polydactyly, renal malformation and cognitive disability. The proteins encoded by BBS gene family members are structurally diverse and the similar phenotypes exhibited by mutations in BBS gene family members is likely due to their shared roles in cilia formation and function. Many BBS proteins localize to the basal bodies, ciliary axonemes, and pericentriolar regions of cells. BBS proteins may also be involved in intracellular trafficking via microtubule-related transport. The protein encoded by this gene is likely not a ciliary protein but rather has distant sequence homology to type II chaperonins. As a molecular chaperone, this protein may affect the folding or stability of other ciliary or basal body proteins. Inhibition of this protein's expression impairs ciliogenesis in preadipocytes. Mutations in this gene cause Bardet-Biedl syndrome type 10. [provided by RefSeq, Jan 2010]

Product images:



Circular map for RG205501