

Product datasheet for **RG218281**

GTPBP10 (NM_001042717) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	GTPBP10
Synonyms:	ObgH2; UG0751c10
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG218281 representing NM_001042717
Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGTGCATTGCAGTTGCGTGTGTTTCAGAAAGTATGGAAATTCATCGATAAGCTAAGACTCTTCACCA
GGGGAGGATCCGGTGGAATGGGTTATCCTCGTTTAGGTGGAGAAGGTGGAAGGTGGTGATGTCTGGGT
TGTAGCCAGAACAGAAATGACTTTAAACAACCTAAAGACAGGTATCCTCGGAAACGGTTTGTGGCTGGA
GTAGGAGCAACAGCAAATCCCAAATGCTGGAAAATCCTCTTTGCTAAGTTGTGTTTCTCATGCAAAAC
CTGCAATTGCAGATTACGCAATTTACAACATTAAAGCCTGAACTTGAAAGATAATGTACAGTGATTTCAA
ACAGATATCAGTAGCTGATCTTCCGGGTTTAATAGAAGGAGCACATATGAACAAAGGAATGGGCCACAAA
TTCTCAAGCATATAGAAAGAACTAGACAACCTACTTTTGTGTTGATATTTCTGGATTTTCAGCTTTCTT
CTCACACTCAATACAGGACAGCTTTTGAACCATAATACTGCTTACAAAAGAGTTGGAATTGTACAAAGA
GGAAGTTGAGAGTTCCAACATATCATCCCCATATCTGCAGTTACTGGAGAAGGAATCGAAGAATTAA
GAATTGTATAAGAAAGTCACTGGATGAACAGGCCAACCAGGAAAATGATGCACCTCATAAGAAACAGTTG
CTTAATTTGTGGATTCTGATACAATGTCTTCTACTGAGCCACCATCAAAGCATGCTGTTACTACTTCCA
AAATGGATATAATT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



Protein Sequence:

>RG218281 representing NM_001042717

Red=Cloning site Green=Tags(s)

MVHCSCVLFRKYGNFIDKLRLFTRGSGGMGYPRLLGGEGKGDDVWVVAQNRMTLKQLKDRYPRKRFVAG
VGANSKFPNAGKSSLLSCVSHAKPAIADYAFTTLKPELGKIMYSDFKQISVADLPGLIEGAHMKMGHKG
FLKHIERTRQLLFVVDISGFQLSSHTQYRTAFETIILLTKELEYKEELQTKPALLAVNKMDLPDAQDKF
HELMSQLQNPKDFLHLFEKNMIPERTVEFQHIIPISAVTGEGIEELKNCIRKSLDEQANQENDALHKKQL
LNLWISDTMSSTEPPSKHAVTTSKMDII

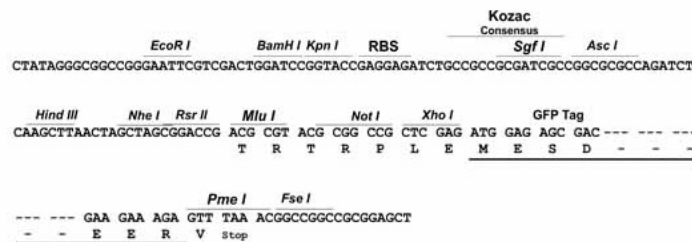
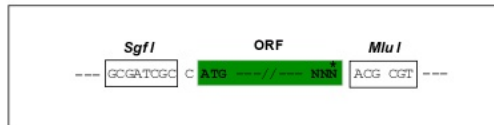
TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN:

NM_001042717

ORF Size:

924 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_001042717.3](#)

RefSeq Size: 3175 bp

RefSeq ORF: 927 bp

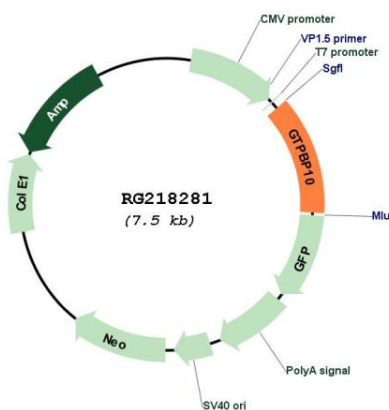
Locus ID: 85865

UniProt ID: [A4DIE9](#)

Cytogenetics: 7q21.13

Gene Summary: Small G proteins, such as GTPBP10, act as molecular switches that play crucial roles in the regulation of fundamental cellular processes such as protein synthesis, nuclear transport, membrane trafficking, and signal transduction (Hirano et al., 2006 [PubMed 17054726]). [supplied by OMIM, Mar 2008]

Product images:



Circular map for RG218281