

Product datasheet for **RC207903**

GTPBP4 (NM_012341) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GTPBP4 (NM_012341) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GTPBP4
Synonyms:	CRFG; NGB; NOG1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RC207903 representing NM_012341
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGCATCGCC

ATGGCACATTACAACCTCAAGAAAATTACGGTGGTGCCGTCGCCAAGGACTTCATAGACCTCACGTTGT
CGAAGACTCAACGAAAGACTCCAACCGTTATTCATAAACATTACCAAATACATCGCATTAGACATTTTAA
CATGAGAAAAGTCAAATTTACTCAACAGAAATTACCATGATAGACTTTCACAAATTCTAACAGATTTCCCC
AAATTGGATGATTCATCCGTTCTATGCTGATTTGATGAATATTCTCTACGACAAGGATCATTACAAGT
TGGCTCTGGGCAAAATAATATTGCCAAAAATTTAGTGGACAATGTTGCTAAAGATTATGTGCGACTGAT
GAAGTATGGCGACTCTCTACCGCTGCAACAGCTGAAGCGTCCGGCCCTGGGACGGATGTGCACAGTG
ATCAAGAGGCAGAAGCAGAGTTGGAGTATTTGGAGCAAGTGCCTCAGCATTTATCCCGTTTGCCAACCA
TTGATCCGAATACCAGGACCCTGCTTTTGTGTGGGTACCCAAATGTTGGGAAGTCCAGCTTCATCAACAA
GGTGACGAGAGCAGAGCTGGATGTCAGCCCTATGCGTTCAACCAAGTCTCTGTTTGTGGGCACATG
GATTATAAGTATCTACGTTGGCAGGTTGTAGACTCCTGGGATCCTGGACCACCCTCTGGAGGATAGGA
ACACCATCGAGATGCAGGCCATCACTGCCTGGCCCACCTCCGTGCTGCAGTCTGTATGTGATGGATT
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AACAAAGCCTCTCATAGTTGTAGCCAACAAATGTGATGTGAAGAGAATAGCTGAACCTTCTGAAGATGATC
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AATAAAGTGAATGAGGTGCTGAATAGACTGCACCTGGCTATCCCAACCAGGAGGGACGATAAGGAGAGGC
CCCTTTTCATCCCTGAAGGAGTGGTGGCTCGCAGGAAGAGGATGGAAACTGAGGAGTCCAGGAAGAAGAG
GGAACGAGATCTTGAGCTGGAAATGGGAGATGATTATATTTTGGATCTTCAGAAGTACTGGGATTTAATG
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CAGCCATCATGAAGAAATTTGAAGAATTAGAAAAAGAAGAAGAGCTGAGAACAGCTGCTGGAGAGTATGA
CAGTGTATCTGAGAGTGAAGACGAAGAGATGCTGGAAATCCGACAGCTGGCAAAGCAAATTCGAGAGAAA
AAGAAGTTGAAAATTTGGAGTCCAAAGAAAAGAATACACAGGGACCCAGGATGCCGCGAACTGCTAAGA
AGGTTCCAGAGGACAGTTTGGAGAAGGAGATGCGTAGTCTTGGTGTGACATGGACGATAAAGACGATGC
CCATTACGAGTCCAGGCAAGAAGATCCCGGAGCATCACTAGGAAAAGAAAGCGGAAGACTCTGCTCCC
CCGTCTCTGTGGCCCGGAGTGGGAGTTGCTCTCGAACTCCACGTGACGTTTCTGGTCTTAGGGATGTCA
AGATGGTGAAGAAAGCAAGACTATGATGAAGAATGCTCAGAAGAAGATGAATCGGTTGGGGAAGAAAGG
GGAGGCGGATAGACACGTGTTTGTATGAAAGCCCAAGCACTTGTGTCTGGGAAGAGGAAAGCTGGTAAA
AAGGACAGGAGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC207903 representing NM_012341
Red=Cloning site Green=Tags(s)

MAHYNFKKITVPSAKDFIDLTLSTQQRKTPTVIHKHYQIHRIRHFYMRKVKFTQQNYHDRLSQILTDFP
 KLDDIHPFYADLMNILYDKDHYKLALGQINIKNLVDNVAKDYVRLMKYGDLSYRCKQLKRAALGRMCTV
 IKRQKQSLEYLEQVRQHL SRLPTIDPNTRTL LCGYPNVGKSSF INKVTRADVDPYAF TTKSLFVGHM
 DYKYLWRQVVDTPGILDHPLEDRNTIEMQAITALAHRAAVLYVMDLSEQCGHGLREQLFQNI RPLFI
 NKPLIIVVANKCDVKRIAE LSEDDQKIF TD LQSEGFPVIE TSTL TEEGVIKVKTEACDRLLAHRVETKMKG
 NKVNEVLNRLHLAIPTRRDDKERPPFIPEGVARRKRMETESRKKRERDLELEMGDDYILD LQKYWDL M
 NLSEKHDKIPEIWEGHNIADYIDPAIMKLEELEKEEELRTAAGEYDSVSESEDEEMLEIRQLAKQIREK
 KKLKILESKEKNTQGPRMPRTAKKVQRTVLEKEMRSLGVDMDKDDAHYAVQARRSR S ITRKRKREDSAP
 PSSVARGSGCSRTPRDVSGLRDVKMVKKAKTMMKNAQKKMNR L GKKGEADRHV FDMKPKHLLSGKRKAGK
 KDRR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2997_b02.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:



ACCN: NM_012341

ORF Size: 1902 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_012341.3](#)

RefSeq Size: 2537 bp

RefSeq ORF: 1905 bp

Locus ID: 23560

UniProt ID: [Q9BZE4](#)

Cytogenetics: 10p15.3

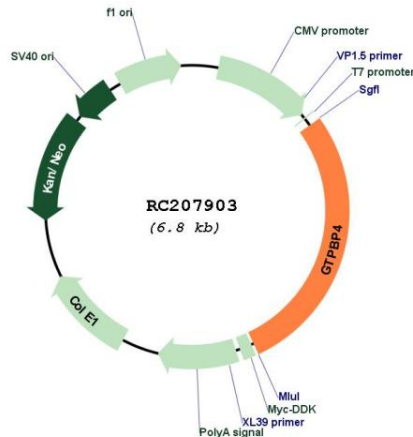
Protein Families: Druggable Genome

MW: 74 kDa

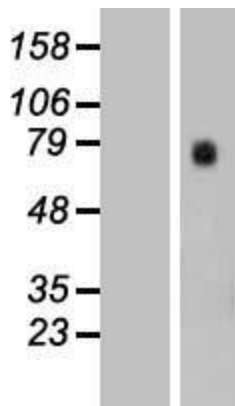
Gene Summary:

GTP-binding proteins are GTPases and function as molecular switches that can flip between two states: active, when GTP is bound, and inactive, when GDP is bound. 'Active' in this context usually means that the molecule acts as a signal to trigger other events in the cell. When an extracellular ligand binds to a G-protein-linked receptor, the receptor changes its conformation and switches on the trimeric G proteins that associate with it by causing them to eject their GDP and replace it with GTP. The switch is turned off when the G protein hydrolyzes its own bound GTP, converting it back to GDP. But before that occurs, the active protein has an opportunity to diffuse away from the receptor and deliver its message for a prolonged period to its downstream target. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC207903



Western blot validation of overexpression lysate (Cat# [LY415798]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC207903 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).