

## Product datasheet for **RG209939**

### GBP2 (NM\_004120) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	GBP2 (NM_004120) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GBP2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG209939 representing NM\_004120  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCTCCAGAGATCAACTTGCCGGGCCAATGAGCCTCATTGATAACACTAAAGGGCAGCTGGTGGTGA  
 ATCCAGAAGCTCTGAAGATCCTATCTGCAATTACGCAGCCTGTGGTGGTGGCGATTGTGGCCCTCTA  
 TCGCACAGGCAAATCCTACCTGATGAACAAGCTGGCTGGGAAGAAAAACGGCTTCTCTAGGCTCCACA  
 GTGAAGTCTCACACCAAGGGAATCTGGATGTGGTGTGCCTCATCCGAAGAAGCCAGAACACACCTAG  
 TTCTGCTCGACTGAGGGCCTGGGAGATATAGAGAAGGGTGACAATGAGAATGACTCCTGGATCTTTGC  
 CTTGGCCATCCTCTGAGCAGCACCTTCGTGTACAATAGCATGGGAACCATCAACCAGCAGGCCATGGAC  
 CAACTTCACTATGTGACAGAGCTGACAGATCGAATCAAGGCAAACCTCACCTGGTAACAATTCTGTAG  
 ACGACTCAGCTGACTTTTGTGAGCTTTTTCCAGCATTGTGTGGACTCTCAGAGATTTACCTGGAAC  
 GGAAGTAGATGGAGAACCATCACTGCTGATGACTACTTGGAGCTTCGCTAAAGCTAAGAAAAGGTA  
 GATAAGAAAAGTAAAAGCTTTAATGATCCTCGGTTGTGCATCCGAAAGTTCTTCCCAAGAGGAAGTGT  
 TCGTCTTCGATTGGCCCGCTCCTAAGAAGTACCTTGTCACTAGAGCAGCTAAAGGAGGAAGAGCTGAA  
 CCCTGATTTTATAGAACAAGTTGCAGAATTTTGTTCCTACATCCTCAGCCATTCCAATGTCAAGACTCT  
 TCAGGTGGCATTCCAGTCAATGGCCCTCGTCTAGAGAGCCTGGTGTGACCTACGTCAATGCCATCAGCA  
 GTGGGGATCTACCCTGCAGGGAGAACGCAGTCTGGCCTTGGCCAGATAGAGAAGTCAAGCCAGTGGAA  
 AAAGGCTATTGCCACTATGAACAGCAGATGGGCCAGAAGGTGCAGCTGCCACGGAAACCTCCAGGAG  
 CTGCTGGACCTGCACAGGGACAGTGAGAGAGAGGCCATTGAAGTCTTATGAAGAAGTCTTTCAAGGATG  
 TGGACCAATGTTCCAGAGGAAATTAGGGGCCAGTTGGAAGCAAGGCGAGATGACTTTTGAAGCAGAA  
 TTCCAAAAGCATCATCAGATTGTTGCATGGCTTTACTTCAGGATATATTTGGCCCTTTAGAAGAAGATGTC  
 AAGCAGGGAACATTTTCTAAACCAGGAGGTTACCGTCTCTTTACTCAGAAGCTGCAGGAGCTGAAGAATA  
 AGTACTACCAGGTGCCAAGGAAGGGGATACAGGCCAAAGAGGTGCTGAAAAAATATTTGGAGTCCAAGGA  
 GGATGTGGCTGATGCACTTCTACAGACTGATCAGTCACTCTCAGAAAAGGAAAAAGCGATTGAAGTGGAA  
 CGTATAAAGGCTGAATCTGCAGAAGCTGCAAAAGAAAATGTTGGAGGAAATACAAAAGAAGATGAGGAGA  
 TGATGGAACAGAAAGAGAAGATTATCAGGAACATGTGAAACAATTGACTGAGAAGATGGAGAGGGACAG  
 GGCCAGTTAATGGCAGAGCAAGAGAAGACCCTCGCTCTTAACTTCAGGAACAGGAACGCCTTCTCAAG  
 GAGGGATTCGAGAATGAGAGCAAGAGACTTCAAAAAGACATATGGGATATCCAGATGAGAAGCAAATCAT  
 TGGAGCCAATATGTAACATACT

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>RG209939 representing NM\_004120  
 Red=Cloning site Green=Tags(s)

MAPEINLPGPMSLIDNTKGQLVNPALKILSAITQPVVVVAIVGLYRTGKSYLMNKLKAGKKNFSLGST  
 VKSHTKGIWMWCVPHPKKPEHTLVLLDTEGLGDIKGDNENDSWIFALAILLSSTFVYNSMGTINQQAMD  
 QLHYVTELTDRIKANSSPGNNSVDDSDAFVSFFPAFVWTLRDFTLLEVDGEPITADDYLELSLKLKRG  
 DKKSKSFNDPRLCIRKFFPKRCFVFDWPAPKYLALHLEQLKEEELNPDFIEQVAEFCSYILSHSNVKT  
 SGGIPVNGPRLESVLTYVNAISSGDLPCRENAVLALAQIENSAAVEKAIHAYEQMQQVQLPTETLQE  
 LLDLHRDSEREAIEVFMKNSFKVDQMFQRKLGALQLEARRDDFCQNSKASSDCCMALLQDIFGPLEEDV  
 KQGTFSKPGGYRLFTQKLQELKNKYYQVPRKGIQAKEVLKYLESKEDVADALLQTDQSLSEKEKAEVE  
 RIKAESAEAAKMLEEIQKNEEMMEQKEKSYQEHVKQLTEKMERDRAQLMAEQEKLALKLQEQLLLK  
 EGFENESKRLQKDIWDIQMRKSLLEPICNIL

**TRTRPLE** – GFP Tag – V

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_004120

**ORF Size:** 1773 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.

**RefSeq:** [NM\\_004120.3](#), [NP\\_004111.2](#)

**RefSeq Size:** 2595 bp

**RefSeq ORF:** 1776 bp

**Locus ID:** 2634

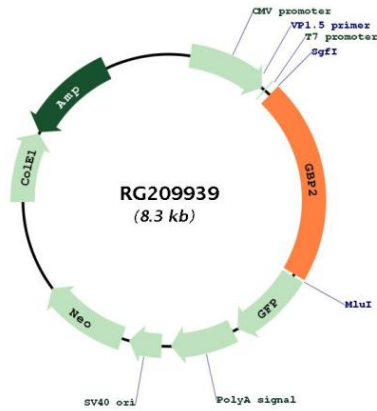
**UniProt ID:** [P32456](#)

**Cytogenetics:** 1p22.2

**Domains:** GBP

**Gene Summary:** This gene belongs to the guanine-binding protein (GBP) family, which includes interferon-induced proteins that can bind to guanine nucleotides (GMP, GDP and GTP). The encoded protein is a GTPase which hydrolyzes GTP, predominantly to GDP. The protein may play a role as a marker of squamous cell carcinomas. [provided by RefSeq, Jul 2013]

**Product images:**



Circular map for RG209939