

Product datasheet for **MG209198**

Gbp5 (NM_153564) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gbp5 (NM_153564) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Gbp5
Synonyms:	5330409J06Rik; Gbp5a
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG209198 representing NM_153564
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCCCCAGAGATTCACATGCCAGAACCCTTGTGCCTCATTGGGAGCACCGAGGGACACCTAGTA
 ACCAGGAAGCCCTGAAGATTCTGTCTGCCATCACACAGCCAGTGGTGGTAGCCATTGTGGGTCTTTA
 TCGCACAGGCAAATCCTACCTGATGAACAAGCTGGCTGGGAAGGAGAAGGGCTTTTCTGTTGGATCCACT
 GTACAGTCTCACACCAAGGGGATCTGGATGTGGTGTGTGCCTCACCCCAAAAGCCAGACCACACTTTGG
 TTCTGCTTGACTGAAGGCCTGGGAGATGTGGAGAAGGATGATAAAAAGAATGATACTCAGATCTTTGC
 ACTAGCAATCCTCCTCAGTAGCACCTTTGTATACAACACTATGAACAAAATTGACCAGGGGGCTATCGAC
 CTATTGCACAATGTGACAGAAGTACAGACTTGTCCGGACAAGAACTCCTCTGATTCTAATCAAAGT
 AGGGTGAAGGACCTGCTGACATGAGCTTCTCCAGACTTGGTGTGGACTCTGAGAGATTTCTTCTGGA
 CCTGCAAGCCAAATGGGCATGCCATCACATCAGATGAATATCTGGAGAATCACTGAAGCTGAAGCAAGGT
 AGCGATGAAAGAACTCAAACATTCAATCTACCGCGGCTGTGCATACAGAAGTTCTTCCAGTAAAGAAAT
 GCTTTGTTTTTGACGCTCCTGCGCTTGGGAAGTAAGCTTTCCAGCTTCCAACACTCAGCAACGAGGAGCT
 GAATTCAGATTTTGTGCAGGACCTTTCAGAATTCTGTTACACATCTTACCCCAATTAAGACCAAGACT
 CTTCCAGGAGGCATCCAGGTCAACGGACCTCGTCTAGAAAGCCTGGTGTGACTTATGTCGATGCCATCA
 ACAGCGGGGCTCTGCCTTCCATAGAGAACACAGTAGTAACCTGGCCCGGAGGGAGAAGCTCTGCAGCAGT
 TCAAAAGGCCATTGGTCACTACGATCAGCTGATGAGCGAGAAGGTGCAGCTGCCACAGAGACCTCCAG
 GAGTCTGGACCTGCACCGACCTGTGAGCGAGAGGCCATAGAAATCTCAGGAAGCATTCGTTCAAGG
 ATGAGGGTGAATTTTTCCAGAAAAGAAATGGAGAGCCTACTAAGTGCAAAGCAGGATGAGATTTGTAAAGAA
 GAACGCGGATGCTTCTGCAGCCCTCTGCTCAACCTACTTGGGAGTATTTTTAAGCCTCTGGAACAAGAA
 GTGGCGCAGGAGTTCTATCATAAACCAGGAGGCCACAAGCTTCTCCTCAGAGGATGGAACAGCTGAAGG
 CAAATTACCGTCAGCAGCCAGGGAAGGGAACACAGGCTGAGGAAGTGTGCGACCTATTTGAACGCCAA
 AGAAACAGTGAGCCGTACAATTCTACAACAGACCAGGTTCTCACAGACAAGGAGATCCAGAAGAAAGCG
 GAACAAGAAAGAGCAGAGGCTGCCCGGCTCAAAGCACAGAGGTTGGAGGCTATTCGCATCCAGGAAGAGC
 AAAGGAAAGCAGAGATGGAGAGACAGCATCAAGAGCAATTGAGGCAAATAGCATTGGAGAAGGCAAGAGT
 TGCACAAGAGCAACAGTGGATCCTGAAGCAGAGAGCCAGGAAGAGGCTGATAGAATCAAGCAGAGCAG
 GAAGCTCAACTCAGAGCACTTCAACAGCAGCTCCAACACATGAGGAAATGAACCACCACCGTAGACATC
 ATCATGACTGTGTATAAGC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG209198 representing NM_153564
 Red=Cloning site Green=Tags(s)

MAPEIHMPEPLCLIGSTEGHLVTNQEALKILSAITQPVVVVAIVGLYRTGKSYLMNKLKAGKEKGFVSGST
 VQSHTKGIWMWCVPHQKPDHTLVLLDTEGLGDVEKDDKNDTQIFALAILLSTFVYNTMNKIDQGAID
 LLHNVTELTDLRTRNSSDSNQTEGEGPADMSFFPDLVWTLRDFFLDLQANGHAITSDEYLENSLKLKQG
 SDERTQTFNLPRLCIQKFFPVKKCFVFDAPALGSKLSQLPTLSNEELNSDFVQDLSEFCSHIFTQSKTKT
 LPGGIQVNGPRLVSLVLYVDAINSGALPSIENTVVTLARRENSAAVQKAIIGHYDQLMSEKVQLPTETLQ
 ELLDLHRTCEREAIIEIFRKHSFKDEGEFFQKELESLLSAKQDEICKKNADASAALCSTLLGSIKPLEQE
 VAQEFYHKPGGHKLFQRMEQLKANYRQPGKGTQAEVLTQTYLNAKETVSRITLQTDQVLTDKEIQKKA
 EQERAEAARLKAQRLEAIRIQEEQRKAEMERQHQEQLRQIALEKARVAQEQQWILKQRAQEEADRIKAEQ
 EAQLRALQQQLQHMREMNHRRHHHDCVIS

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

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:	<ol style="list-style-type: none">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_153564.2 , NP_705792.2
RefSeq Size:	3021 bp
RefSeq ORF:	1773 bp
Locus ID:	229898
UniProt ID:	Q8CFB4
Cytogenetics:	3 H1
Gene Summary:	As an activator of NLRP3 inflammasome assembly, plays a role in innate immunity and inflammation. Promotes selective NLRP3 inflammasome assembly in response to microbial and soluble, but not crystalline, inflammasome activating agents (PubMed:22461501). Hydrolyzes GTP, but in contrast to other family members, such as GBP1 and GBP2, does not produce GMP (By similarity).[UniProtKB/Swiss-Prot Function]