

Product datasheet for **RC201236**

GBP1 (NM_002053) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GBP1 (NM_002053) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GBP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC201236 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGC**

ATGGCATCAGAGATCCACATGACAGGCCCAATGTGCCTCATTGAGAACACTAATGGGCGACTGATGGCGA
 ATCCAGAAGCTCTGAAGATCCTTTCTGCCATTACACAGCCTATGGTGGTGGCAATTGTGGGCCTCTA
 CCGCACAGGCAAATCCTACCTGATGAACAAGCTGGCTGGAAGAAAAAGGGCTTCTCTGGGCTCCACG
 GTGCAGTCTCACACTAAAGGAATCTGGATGTGGTGTGCCCCACCCCAAGAAGCCAGGCCACATCCTAG
 TTCTGCTGGACACCGAGGGTCTGGGAGATGTAGAGAAGGGTGACAACCAGAATGACTCCTGGATCTTCGC
 CCTGGCCGTCCTCTGAGCAGCACCTTCGTGTACAATAGCATAGGAACCATCAACCAGCAGGCTATGGAC
 CAACTGTACTATGTGACAGAGCTGACACATAGAATCCGATCAAAATCCTCACCTGATGAGAATGAGAATG
 AGGTTGAGGATTCAGCTGACTTTGTGAGCTTCTCCAGACTTTGTGTGGACACTGAGAGATTTCTCCCT
 GGACTTGAAGCAGATGGACAACCCCTCACACCAGATGAGTACCTGACATACTCCCTGAAGCTGAAGAAA
 GGTACCAGTCAAAAAGATGAAACTTTAACTGCCAGACTCTGTATCCGGAAATTTCTCCCAAAGAAAA
 AATGCTTTGTCTTTGATCGGCCCGTTACCCGCAGGAAGCTTGCCAGCTCGAGAACTACAAGATGAAGA
 GCTGGACCCCAATTTGTGCAACAAGTAGCAGACTTCTGTTCTACATCTTTAGTAATTCAAAACTAA
 ACTCTTTCAAGAGGCATCCAGGTCAACGGGCTCGTCTAGAGAGCCTGGTGTGACCTACGTCAATGCCA
 TCAGCAGTGGGGATCTGCCGTGCATGGAGAAGCAGTCTGGCCTTGCCAGATAGAGAACTCAGCTGC
 AGTGCAAAAGGCTATTGCCCACTATGAACAGCAGATGGCCAGAGGTGCAGTGGCCACAGAAAGCCTC
 CAGGAGCTGCTGGACCTGCACAGGGACAGTGAGAGAGAGGCCATTGAAGTCTTCATCAGGAGTTCCTTCA
 AAGATGTGGACCATCTATTTCAAAGGAGTTAGCGGCCAGCTAGAAAAAAGCGGGATGACTTTTGTAA
 ACAGAATCAGGAAGCATCATCAGATCGTTGCTCAGGTTTACTTCAGGTCATTTTCAGTCTCTAGAAGAA
 GAAGTGAAGCGGGAATTTATTCGAAACAGGGGCTATCGTCTCTTTGTTGAGAAGCTACAAGACCTGA
 AGAAAAAGTACTATGAGGAACCGAGGAAGGGGATACAGGCTGAAGAGATTCTGCAGACATACTTGAAATC
 CAAGGAGTCTATGACTGATGCAATTCTCCAGACAGACCAGACTCTCACAGAAAAAGAAAGGAGATTGAA
 GTGGAACGTGTGAAAGCTGAGTCTGCACAGGCTTCAGCAAAATGTTGCAGGAAATGCAAGAAAGAAATG
 AGCAGATGATGGAACAGAAGGAGAGGAGTTATCAGGAACACTTGAACAACCTGACTGAGAAGATGGAGAA
 CGACAGGGTCCAGTTGCTGAAAGAGCAAGAGAGGACCCTCGCTCTTAACTTCAGGAACAGGAGCAACTA
 CTAAGAGAGGATTTCAAAGAAAGCAGAATAATGAAAAATGAGATACAGGATCTCCAGACGAAATGA
 GACGACGAAAGGCATGTACCATAAGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC201236 protein sequence
 Red=Cloning site Green=Tags(s)

MASEIHMTGPMCLIENTNGRLMANPEALKILSAITQPMVVVAIVGLYRTGKSYLMNKLAKKKKGFSLGST
 VQSHTKGIWMWCVPHPKPGHILVLLDTEGLGDVEKGDNDNWDIFALAVLLSSTFVYNSIGTINQQAMD
 QLYYVTELTHIRSKSSPDENENEVEDSADFVSFFPDFVWTLRDFSLDLEADGQPLTPDEYLTYSKLKK
 GTSQKDETFNLPRLCIRKFFPKKCFVDRPVHRRKLAQLEKLQDELDPEFVQQVADFCYSYIFSNSKTK
 TLSGGIQVNGPRLESLVLTYYNAISSGDLPCMENAVLALAQIENSAVQKAIHAEYEQMGQKVLPTESL
 QELLDLHRDSEREATIEVFIRSSFQKDVHDLFQKELAAQLEKKRDDFCQKQNEASSDRCSGLLQVIFSPLEE
 EVKAGIYSKPGGYRLFVQKLQDLKKYYEPRKGIQAEIILQTYLKSKESTMDAILQTDQTLTEKEKEIE
 VERVKAESAQASAKMLQEMQRKNEQMEQKERSYQEHKQLTEKMENDRVQLLKEQERTLALKLQEQEQ
 LKEGFQKESRIMKNEIQDLQTKMRRRKACTIS

TRTRPLE**QKL**ISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6150_a11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002053

ORF Size: 1776 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.

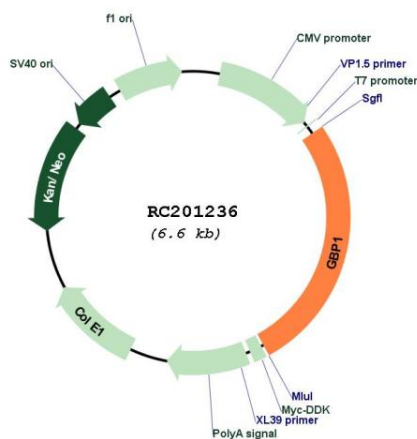
RefSeq: [NM_002053.1](#), [NP_002044.1](#)

RefSeq Size: 3050 bp

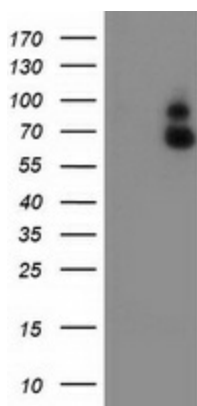
RefSeq ORF: 1779 bp

Locus ID:	2633
UniProt ID:	P32455
Cytogenetics:	1p22.2
Domains:	GBP
MW:	67.9 kDa
Gene Summary:	Guanylate binding protein expression is induced by interferon. Guanylate binding proteins are characterized by their ability to specifically bind guanine nucleotides (GMP, GDP, and GTP) and are distinguished from the GTP-binding proteins by the presence of 2 binding motifs rather than 3. [provided by RefSeq, Jul 2008]

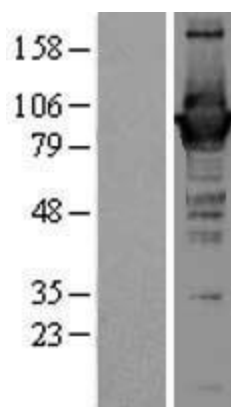
Product images:



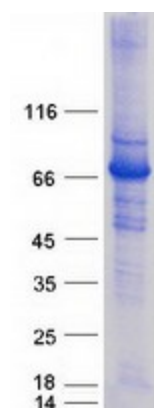
Circular map for RC201236



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY GBP1 (Cat# RC201236, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-GBP1 (Cat# [TA503589]). Positive lysates [LY400751] (100ug) and [LC400751] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400751]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201236 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified GBP1 protein (Cat# [TP301236]). The protein was produced from HEK293T cells transfected with GBP1 cDNA clone (Cat# RC201236) using MegaTran 2.0 (Cat# [TT210002]).