

## Product datasheet for RC204396

### GABPB2 (GABPB1) (NM\_002041) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	GABPB2 (GABPB1) (NM_002041) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GABPB2
Synonyms:	BABPB2; E4TF1; E4TF1-47; E4TF1-53; E4TF1B; GABPB; GABPB-1; GABPB2; NRF2B1; NRF2B2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC204396 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGTCCTGGTAGATTTGGGAAAGAAGCTTTTAGAAGCGGCACGAGCAGGTCAAGATGATGAAGTTCGTA  
TTTTGATGGCAAATGGAGCTCCCTTTACTACAGACTGGCTGGAACTTCTCCACTTCATCTAGCAGCACA  
GTATGGTCATTATCCACCACAGAGGTACTGCTGCGAGCTGGTGTGAGCAGAGATGCCAGAACCAAAGTG  
GACCGAACACCATTACATATGGCAGCTTCTGAGGGCCATGCCAGCATAGTAGAGTTTTACTTAAGCATG  
GTGCTGATGTCAATGCAAAGGACATGTTAAAGATGACAGCTCTCCATTGGGCCACAGAACAATCATCA  
AGAGGTGGTGGAACTTTAATCAAATATGGTGTGATGTACACACGCAAAGTAAATTTGTAAAACCTGCA  
TTTGATATTTCAATAGACAATGGAAATGAAGATTTAGCAGAGATATTACAGATTGCTATGCAGAACCAAA  
TCAACACAAAACCCAGAGAGTCTGACACTGTGACAATACATGCTGCAACACCACAGTTTATCATTGGACC  
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GTATCTGCTGTTCAAGTTTGGAACTCTTCTACATCAGTATTAGCTACATTAGCTGCCTTAGCTGAAGCAT  
CTGCTCCATTGTCCAATCTTCAGAACTCCAGTAGTGCCACAGAAGAAGTAGTTACTGCAGAATCTGT  
GGATGGTGCCATTACAGCAAGTAGTTAGTTCAGGGGGTACAGCAAGTCATCAACAATAGTTACAGATGGAATT  
CAGCTTGGAAATTTGCACTCTATTCCAACAGTGAATTGGTCAAGCCATCATTGTGACCATGCCAGATG  
GACAACAAGTATTAACAGTACCAGCAACAGACATTGCTGAAGAACTGTTATAAGTGAAGAACCACAGC  
TAAGAGACAATGTATCGAAATAATTGAAAACCGGGTGAATCTGCAGAAATAGAAGTAAGGAGTCTTTTA  
CCCGGTGTGCTTTCGCGAGTCATCCAAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTAA



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**Protein Sequence:** >RC204396 protein sequence  
Red=Cloning site Green=Tags(s)

MSLVDLGKLLAARAGQDDEVRI LMANGAPFTTDWLGT SPLHLAAQYGHYSTTEVLLRAGVSRDARTKV  
 DRTP LHM AASEGHASIVEVLLKHGADVNAK DMLKMTALHWATEH NHQEVVELLIKYGADVHTQSKFCKTA  
 FDISIDNGNEDLAEILQIAMQNQINTNPESPDTVTIHAATPQFIIGPGGVNLTGLVSSSENSKATDETG  
 VSAVQFGNSSTSVLATLAALAEASAPLSNSSETPVVATEEVVTAESVDGAIQQVVSSGGQQVITIVTDGI  
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 PGVLCRSHPK

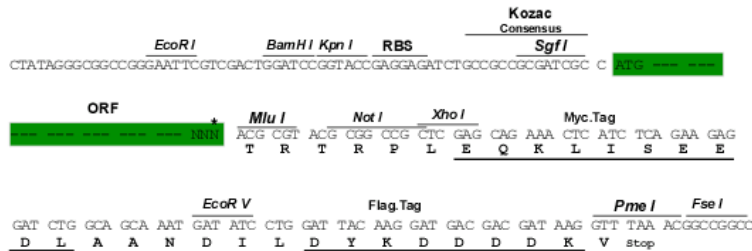
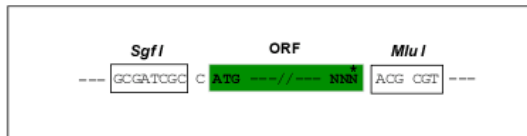
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6311\\_g07.zip](https://cdn.origene.com/chromatograms/mk6311_g07.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_002041

**ORF Size:** 1080 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\\_002041.4](#)

**RefSeq Size:** 1658 bp

**RefSeq ORF:** 1083 bp

**Locus ID:** 2553

**UniProt ID:** [Q06547](#)

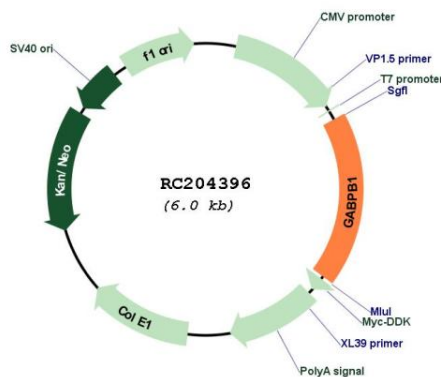
**Cytogenetics:** 15q21.2

**Protein Families:** Transcription Factors

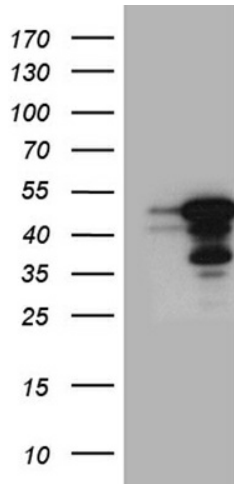
**MW:** 38.1 kDa

**Gene Summary:** This gene encodes the GA-binding protein transcription factor, beta subunit. This protein forms a tetrameric complex with the alpha subunit, and stimulates transcription of target genes. The encoded protein may be involved in activation of cytochrome oxidase expression and nuclear control of mitochondrial function. The crystal structure of a similar protein in mouse has been resolved as a ternary protein complex. Multiple transcript variants encoding distinct isoforms have been identified for this gene. [provided by RefSeq, Jul 2008]

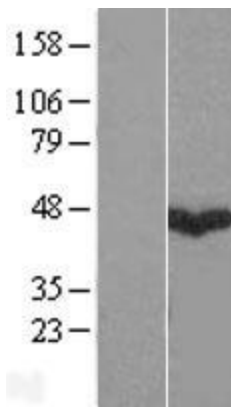
## Product images:



Circular map for RC204396



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY GABPB1 (Cat# RC204396, 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-GABPB1 (Cat# [TA811268])(1:2000). Positive lysates [LY419570] (100ug) and [LC419570] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY419570]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204396 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).