

Product datasheet for **RG229009**

DBC2 (RHOBTB2) (NM_001160036) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DBC2 (RHOBTB2) (NM_001160036) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	RHOBTB2
Synonyms:	DBC2; DEE64; EIEE64; p83
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide
Sequence:

>RG229009 representing NM_001160036
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGATTCTGACATGGATTATGAAAGGCCAAACGTAGAGACCATCAAGTGCCTTGTGGTGGGGGACAACG
CCGTGGGTAAAGACCAGGCTCATCTGTGCCCGCGCTTGCAATGCCACCCTACCCAGTACCAGCTGCTGGC
CACGCATGTGCCACAGTATGGGCCATCGACCAATATCGTGTGTGCCAGGAGGTGCTGGAACGCTCCCGA
GACGTGGTAGATGATGTGACGCTCTCTGCGCCTCTGGGACACCTTTGGAGACCACCACAAAGACCGTCTC
GCTTTGCTTATGGGAGATCTGATGTGGTGGTTCTGTGCTTCTCCATTGCCAACCCCAATTCCTCCACCA
TGTCAAGACCATGTGGTACCCAGAAATCAAGCACTTCTGCCCCGAGCACCTGTCTATCTTGGTGGGCTGC
CAGTTGGACCTGCGCTACGCTGACCTGGAGGCTGTCAACAGGGCTAGGCGACCCTTGGCTAGGCCATCA
AACCTAATGAAATCCTGCCCCAGAGAAGGGTCGGGAGGTGGCCAAGGAGCTGGGCATCCCTACTATGA
GACCAGCGTGGTGGCCAGTTCCGCATCAAGGACGTCTTTGACAACGCCATCCGAGCTGCACTCATCTCC
CGCCGCCACCTGCAGTTCTGGAAGTCCCACCTCCGCAATGTGCAGCGCCCTCTGCTGCAGGCACCCTTCC
TACCCCAAGCCACCGCCCGGATCATCGTGGTGCCTGACCCTCCCTCCAGCAGCGAGGAGTGCCTCCGC
CCACCTCTGGAGGACCGCTCTGCGCGGACGTATCCTGGTGTGCAGGAGCGGGTGCGCATCTTTGCC
CACAAGATCTACCTCTCCACCTCCTCCTCAAGTTCTATGACCTGTTCTCATGGACCTGAGTGAGGGGG
AGCTGGGGGGCCCTCGGAGCCAGGGGGCACCCACCCAGAGGACCACCGGGCCACTCTGATCAACACCA
CCACCATCACCACCACCACCATGGGCGAGACTTCTGCTCCGAGCAGCCAGCTTTGACGTGTGCGAGAGC
GTGGATGAGGCTGGGGCTCCGGTCTGCTGGCTCCGTGCTTCCACCAGCGAGGGATCTTACGGGGCA
ACGGAACAGGGTACCTACCGGGCAGGGTCTGTGCTTCTTCCAGCCGAGCTTTTGTGAGCATCCA
GGAAGAGATGGCAGAAGATCCTCTCACCTACAAATCCCGGCTGATGGTGGTGGTGAAGATGGACAGTTCC
ATCCAGCCGGGGCCCTTCCGGGCTGTCTCAAGTACCTGTACACGGGGAGCTAGATGAGAACGAGCGTG
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TCTCAACAATGAGGCCTTCATGAACCAGGAGATCACCAAGGCCTTCCACGTCGCGCGACCAACCGGGT
AAGGAGTGCTTGGCAAAGGCACCTTCTCAGATGTGACCTTATCCTGGATGATGGCACCATCAGCGCCC
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CACCCGGGAGGTGGTGTTCCTACACAAGCAAGAGCTGCATGCGGGCCGTGCTGGAATACCTCTACACC
GGCATGTTACCTCCAGCCCGACCTGGATGACATGAAGCTCATATTCTAGCCAACCGCCTCTGCCTGC
CACACCTGGTTGCCCTCACAGAGCAGTACACAGTGACCGGGCTGATGGAAGCGACCCAGATGATGGTGG
CATCGATGGGGACGTCTTGTGTTCTGGAAGTGGCTCAGTTCCTGTGCGTACCAGCTGGCCGACTGG
TGTCTCCACCACATCTGCACCAACTACAACAACGTGTGCCGCAAGTTCCTCCGAGACATGAAGGCCATGT
CCCCAGAAAACCAGGAGTATTTGAGAAGCATCGGTGGCCACCTGTGTGGTACCTGAAGGAGGAAGATCA
TTACCAGCGGGCACGGAAGGAGCGTGAGAAGGAGGACTACCTCCACCTCAAGCGGCAGCCAAACGGCGT
TGGCTCTTCTGGAACAGTCCATCCTCCCGTCTTCTCGGCAGCCTCCTCCTCATCCCCATCTTCTCCT
CGGCTGTGGTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG229009 representing NM_001160036
 Red=Cloning site Green=Tags(s)

MDSMDYERPNETIKCVVVDNAVGKTRLICARACNATLTQYQLLATHVPTVWAIQYRVCQEVLEERSR
 DVVDDVSVSLRLWDTFGDHHKDRRFAYGRSDVVVLCFSIANPNLSLHHVKTMWYPEIKHFCPRAPVILVGC
 QLDLRYADLEAVNRARRPLARPIKNEILPPEKGREVAKELGIPYYETSVAQFGIKDVFDAIRAALIS
 RRHLQFWKSHLRNVQRPLLQAPFLPPKPPPIIIVPDPSSSEECPAHLLDPLCADVILVQERVRIFA
 HKIYLSSTSSKFYDLFLMDLSEGLGGPSEGGTHPEDHQHSDQHSHHHHHHHHGRDFLLRAASFVDCES
 VDEAGSGSPAGLRASTSDGILRGNGTGYLPGRGRVLSWSRAFVSIQEEMAEDPLTYKSRLMVVVKMDS
 IQPGPFRAVLKYLTYGELDENEDLMHIAHIAELLEFDLRMMVANILNNEAFMNQEITKAFHVRRTNRV
 KECLAKGTFSDVTFILDDGTISAHKPLLISSCDWMAAMFGGPFVESSTREVVFPYTSKSCMRVLEYLYT
 GMFTSSPDLDDMKLIILANRLCLPHLVALTEQYTVTGLMEATQMMVDIDGDVLFLELAQFHCAYQLADW
 CLHHICTNYNNVCRKFPKPRDMKAMSPENQYEFKHRWPPVWYLKEEDHYQRARKEREKEDYLHLKRPKRR
 WLFWNSSPSSSAASSSSPSSSSAVV

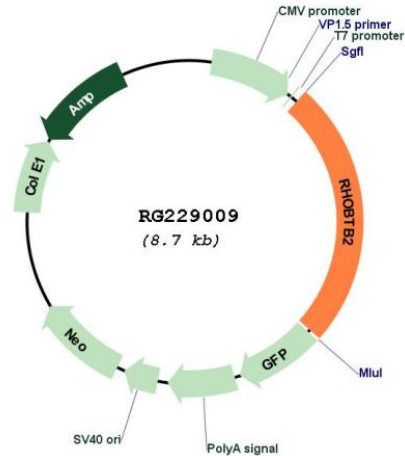
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:


ACCN: NM_001160036

ORF Size: 2247 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:	<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:	<u>NM_001160036.1, NP_001153508.1</u>
RefSeq Size:	5261 bp
RefSeq ORF:	2250 bp
Locus ID:	23221
UniProt ID:	<u>Q9BYZ6</u>
Cytogenetics:	8p21.3
Protein Pathways:	Ubiquitin mediated proteolysis
Gene Summary:	The protein encoded by this gene is a small Rho GTPase and a candidate tumor suppressor. The encoded protein interacts with the cullin-3 protein, a ubiquitin E3 ligase necessary for mitotic cell division. This protein inhibits the growth and spread of some types of breast cancer. Three transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Nov 2011]