

Product datasheet for **RG217877**

DEF6 (NM_022047) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DEF6 (NM_022047) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	DEF6
Synonyms:	IBP; SLAT; SWAP70L
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG217877 representing NM_022047
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCCCTGCGCAAGGAAGTCTCAAGTCCATCTGGTACGCCCTTACCGCGCTGGACGTGGAGAAGAGTG
 GCAAAGTCTCCAAGTCCCAGCTCAAGGTGCTGTCCACAACCTGTACACGGTCTGCACATCCCCATGA
 CCCCGTGGCCCTGGAGGAACACTTCCGAGATGATGATGACGGCCCTGTGTCCAGCCAGGGATACATGCC
 TACCTCAACAAGTACATCCTGGACAAGGTGGAGGAGGGGCTTTTGTAAAGAGCACTTTGATGAGCTGT
 GCTGGACGCTGACGGCCAAGAAGAACTATCGGGCAGATAGCAACGGGAACAGTATGCTCTCCAATCAGGA
 TGCCTCCGCCTCTGGTGCCTCTCAACTTCTGTCTGAGGACAAGTACCCTCTGATCATGGTTCCTGAT
 GAGGTGGAATACCTGCTGAAAAGGTACTCAGCAGCATGAGCTTGAGGTGAGCTTGGTGGAGCTGGAGG
 AGCTTCTGGCCAGGAGGCCAGGTGGCCAGACCACCGGGGGCTCAGCGTCTGGCAGTCTCTGGAGCT
 CTTCAATTCGGGCGCTGCTGCGGGCGTGGCCGGGACACCCTCAGCATGGCCATCCAGAGGTCTAC
 CAGGAGCTCATCCAAGATGTCTGAAGCAGGGCTACCTGTGGAAGCAGGGCACCTGAGAAGGAAGTGGG
 CCGAACGCTGTTCCAGCTGCAGCCAGCTGCCTCTGCTACTTTGGGAGTGAAGAGTGAAGAGAGAAAAG
 GGGCATTATCCCGCTGGATGCACACTGCTGCGTGGAGGTGCTGCCAGACCAGCGACGGAAAGCGCTGCATG
 TTCTGTGTGAAGCAGCCACCCGACGTATGAGATGAGCGCTCAGACACCGCCAGCGCCAGGAGTGGGA
 CAGCTGCCATCCAGATGGCGATCCGGCTGCAGGCCGAGGGGAAGACGTCCCTACACAAGGACCTGAAGCA
 GAAACGGCGCAGCAGCGGGAGCAGCGGGAGCGCGCCGGCGGGCAAGGAAGAGGAGCTGCTGCGGCTG
 CAGCAGCTGCAGGAGGAGAAGGAGCGGAAGTGCAGGAGCTGGAGCTGCTGCAGGAGCGCAGCGGCAGG
 CCGACCGCTGCTGCAGGAGGAGGAGGAACGGCGCCGACCCAGCAGCAGCGGAGCTGCAGCAGGCGTCTCGA
 GGGCCAACTGCGCGAGGCGGAGCAGGCCGGGCTCCATGCAGGCTGAGATGGAGCTGAAGGAGGAGGAG
 GCTGCCCGCAGCGCAGCGCATCAAGGAGCTGGAGGAGTGCAGCAGCGGTTGCAGGAGCCCTGCAAC
 TAGAGGTGAAAGCTCGCGAGATGAAGAATCTGTGCGAATCGCTCAGACCAGACTGCTGGAAGAGGAGGA
 AGAGAAGCTGAAGCAGTTGATGCAGCTGAAGGAGGAGCAGGAGCGCTACATCGAACGGGCGCAGCAGGAG
 AAGGAAGAGCTGCAGCAGGAGATGGCACAGCAGAGCCGCTCCCTGCAGCAGGCCAGCAGCAGCTGGAGG
 AGGTGCGGCAGAACCGCAGAGGGCTGACGAGGATGTGGAGGCTGCCAGAGAAAAGTGCAGGAGCCAG
 CACCAACGTGAAACTGGAATGTCAGATGAACCGGCTGATGCATCCAATTGAGCTGGAGATAAGCGT
 CCGGTACCAGCAGCTCCTTCTCAGGCTCCAGCCCCCTGCTTGGCCACCGTGACTCCTCCCTAAAGC
 GCCTGACCCGCTGGGATCCCAGGGCAACAGGACCCCTCGCCAAACAGCAATGAGCAGCAGAAGTCCCT
 CAATGGTGGGATGAGGCTCCTGCCCGGCTTCCACCCCTCAGGAAGATAAACTGGATCCAGCACCAGAA
 AAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG217877 representing NM_022047
 Red=Cloning site Green=Tags(s)

MALRKELLKSIWYAFTALDVEKSGKVSQSLKVLSHNLVTVLHHPHPVALEEHRDDDDGPVSSQGYMP
 YLNKYILDKVEEGAFVKEHFDELWTLTAKKNYRADSNGNSMLSNQDAFRLWCLFNFLSEDKYPLIMVPD
 EVEYLLKKVLSMSLEVLGELELLAQEAQVAQTGGLSVWQFLELFNSGRCLRGVGRDTLSMAIHEVY
 QELIQDVLKQGYLWKRGLRRNWAERWFQLQPSCLCYFGSEECKEKRGIIPLDHCCVEVLPDRDGKRCM
 FCVKTATRTYEMSASDRQRQEWTAAIQMAIRLQAEKTSLHKDLKQKRREQRERERRAAKEEELLRL
 QQLQEEKERKLELELLQEAQRQAERLLQEEERRRSQHRELQQALEGQLREAEQARASMQAEMELKEEE
 AARQRRIKELEEMQRLQEALQLEVKARRDEESVRIAQTRLLEEEEEKLQMLQLEEERYIERAQQE
 KEELQEQEMAQQSRLQQAQQLEEVQRNRQRADEDVEAAQRKLRQASTNVKHWNVQMNRLMHPPIEPGDKR
 PVTSSFSQFPPLLAHRDSSLKRLTRWGSQGNRTPSPNSNEQQKSLNGGDEAPAPASTPQEDKLDPAPE
 N

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



ACCN: NM_022047

ORF Size: 1893 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_022047.2](#), [NP_071330.2](#)

RefSeq Size: 2320 bp

RefSeq ORF: 1896 bp

Locus ID: 50619

UniProt ID: [Q9H4E7](#)

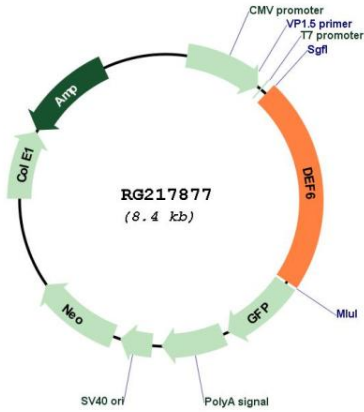
Cytogenetics: 6p21.31

Domains: PH

Protein Families: Druggable Genome

Gene Summary: DEF6, or IBP, is a guanine nucleotide exchange factor (GEF) for RAC (MIM 602048) and CDC42 (MIM 116952) that is highly expressed in B and T cells (Gupta et al., 2003 [PubMed 12923183]).[supplied by OMIM, Mar 2008]

Product images:



Circular map for RG217877