

## Product datasheet for **RG234136**

### DEF8 (NM\_001242818) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	DEF8 (NM_001242818) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	DEF8
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG234136 representing NM_001242818 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAATATGATGAGAAGCTGGCCGTTCCGGCAGGCCACCTCAACCCCTTCAACAAGCAGTCTGGGC  
CGAGACAGCATGAGCAGGGCCCTGGGGAGGAGGTCCCGGACGTCCTCTGAAGAGGCCCTGCCTGAGCT  
GCCCCCTGGGGAGCCGGAATCCGCTGCCCTGAACCGTGATGGATCTCGGCCTGTCTGAGGACCACTTC  
TCCCGCCCTGTGGGTCTGTTCTGGCCTCTGACGTCCAGCAGCTGCGGCAGGCCGATCGAGGAGTGAAGC  
AGGTGATTCTGGAGCTGCCCGAGCAGTCGGAGAAGCAGGATGCCGTGGTGGCAGTCAACCCCTCCG  
GCTGAAGCTCCAGGAGCTGAAGGACCCCAATGAGGATGAGCCAAACATCCGAGTGCCTCTGAGCACCGC  
TTTTACAAGGAGAAGAGCAAGAGCGTCAAGCAGACCTGTGACAAGTGAACACCATCATCTGGGGGCTCA  
TTCAGACCTGGTACACCTGCACAGGGTGTATTACCGCTGTACAGTAAGTGCTTGAACCTCATCTCCAA  
GCCCTGTGTGAGCTCCAAAGTCAGCCACCAAGCTGAATACGAACTGAACATCTGCCCTGAGACAGGGCTG  
GACAGCCAGGATTACCGCTGTGCCGAGTGCCGGGCGCCATCTCTGCGGGGTGTGCCAGTGAGGCCA  
GGCAGTGCAGTACACCGCCAGTACTACTGCAGCCACTGCCACTGGAACGACCTGGCTGTGATCCCTGC  
ACGCGTTGTACACAAGTGGGACTTTGAGCCTCGAAAGTTTCTCGCTGCAGCATGCGCTACCTGGCGCTG  
ATGGTGTCTCGGCCGTAAGTCTCAGGCTCCGGGAGATCAACCCCTCTGCTGTTGAGTACGTGGAGGAGCTGG  
TGGAGATTCGCAAGCTGCGCCAGGACATCCTGCTCATGAAGCCGTAATCATCACCTGCAGGAGGCCAT  
GGAGGCTCGTCTGCTGCTGCAGCTCCAGGATCGGCAGCATTTTGTGGAGAACGACGAGATGTAAGTCTGTC  
CAGGACCTCCTGGACGTGCATGCCGGCCGCTGGGCTGCTCGCTCACCGAGATCCACACGCTCTTCGCCA  
AGCACATCAAGCTGGACTGCGAGCGGTGCCAGGCCAAGGGCTTCGTGTGTGAGCTCTGCAGAGAGGGCGA  
CGTGTGTTCCCGTTCGACAGCCACAGCTGTGTGCGCCGACTGCTCCGCGGTCTTCACAGGGACTGC  
TACTACGACAAGTCCACCACTTGTCCCAAGTGTGCCCGGCTCAGCCTGAGGAAGCAGTGCCTCTCCAGG  
AGCCAGGTCCCGATGTGGAGGCC

AGCGGACCGACGCGTACGCGCCGCTCGAG - GFP Tag - GTTTAA



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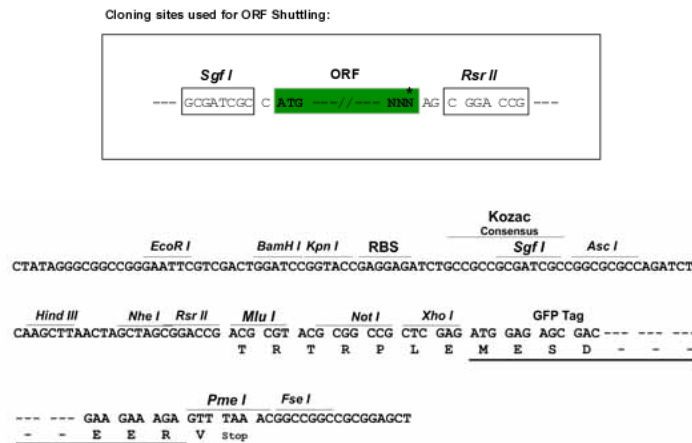
**Protein Sequence:** >RG234136 representing NM\_001242818  
Red=Cloning site Green=Tags(s)

MEYDEKLARFRQAHLNPFNKQSGPRQHEQGPGEVDPVTPEEALPELPPGEPEFRPCPERVMDLGLSEDF  
 SRPVGLFLASDVQQLRQAIEECKQVILELPEQSEKQKDAVVRLIHLRLKLQELKDPNEDEPNIRVLLLEHR  
 FYKEKSKSVKQTCDKCNTIIWGLIQTWYCTGYYRCHSKLNLISKPCVSSKVSHQAEYELNICPETGL  
 DSQDYRCAECRAPISLRGVPSEARQCDYTGQYYCSHCHWNLDLAVIPARVVHNWDFEPRKVSRCMSRYLAL  
 MYSRPVLRRLREINPLLSYVEELVEIRKLRQDILLMKPYFITCREAMEARLLLQLQDRQHFVENDEMYSV  
 QDLLDVHAGRLGCSLTEIHTLFAKHILKDCERCQAKGFVCELCREGDVLPFFDSHTSVCADCSAVFHRDC  
 YYDNSTTCPKCARLSLRKQSLFQEPGPDVEA

SGPTRRRLE – GFP Tag – V

**Restriction Sites:** SgfI-RsrII

**Cloning Scheme:**



**ACCN:** NM\_001242818

**ORF Size:** 1353 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\\_001242818.2](#)

**RefSeq Size:** 3662 bp

**RefSeq ORF:** 1356 bp

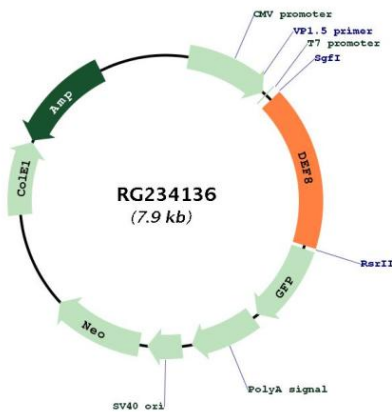
**Locus ID:** 54849

**UniProt ID:** [Q6ZN54](#)

**Cytogenetics:** 16q24.3

**Gene Summary:** Positively regulates lysosome peripheral distribution and ruffled border formation in osteoclasts. Involved in bone resorption.[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for RG234136