

Product datasheet for **RG211190**

DUSP7 (NM_001947) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DUSP7 (NM_001947) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	DUSP7
Synonyms:	MKPX; PYST2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG211190 representing NM_001947 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCCTGCAAGAGCGCCGAGTGGCTGCAGGAGGAGCTGGAGGCGCGCGCGCGCTCCTTGCTGCTGC
TCGACTGCCGGCCGACGAGCTCTCGAGTCGTCGACATCGAGACGGCCATCAACTGGCCATCCCGGG
CCTCATGTTGCGCCGCTGCGCAAGGGCAACCTGCCATCCGCTCCATCATCCCCAACACGCCGACAAG
GAGCGCTTCGCCACGCGCTGCAAGGCGCCACCGTGTCTACGACGAGGCCACGGCCGAGTGGCAGC
CCGAGCCCGCGCTCCCGCTCCGTGCTCGGCCTGCTCCTACAGAAGCTGCGCGACGACGGCTGCCAGGC
CTACTACCTCCAAGGTGTTCAACAAGTTTCAAACAGAGTACTCTGAGCACTGCCGAGACCAACGTGGAC
AGCTCTTCTCGCCGAGCAGCTCGCCACCCACCTCAGTGTGGGCTGGGGGGCTGCGCATCAGCTCTG
ACTGCTCCGACGGCGAGTCGGACCGAGAGCTGCCAGCAGTGCCACCGAGTCAGACGGCAGCCCTGTGCC
ATCCAGCAACCAGCCTTCCCTGTCCAGATCTGCCCTACCTCTACCTCGGCTGCGCCAAGGACTCCACC
AACCTGGACGTGCTCGGCAAGTATGGCATCAAGTATATCTCAATGTACACCCAACCTACCCAACGCT
TCGAGCACGGCGGAGTTCACCTACAAGCAGATCCCCATCTCTGACCACTGGAGCCAGAACCTCTCCCA
GTTCTTCCCTGAGGCCATCAGCTTCATTGACGAAGCCCGCTCCAAGAAGTGTGGTGTCTGGTGCAGTGC
CTGGCAGGCATCAGCCGCTCAGTGACGGTCACTGTGGCCTATCTGATGCAGAAGTGAACCTGTCACTCA
ACGACGCCTACGACTTTGTCAAGAGGAAAAAGTCCAACATCTCGCCCAACTTCAACTTCATGGGGCAGCT
GCTGGACTTTGAGCGGACGCTGGGGCTAAGCAGCCGTGCGACAACCACGCGTCGAGTGAGCAGCTCTAC
TTTTCCACGCCCAACCAACAACCTGTTCCCACTCAATACGCTGGAGTCCACG

AC**GGGCCGCT**CGAG - GFP Tag - GTTTAA



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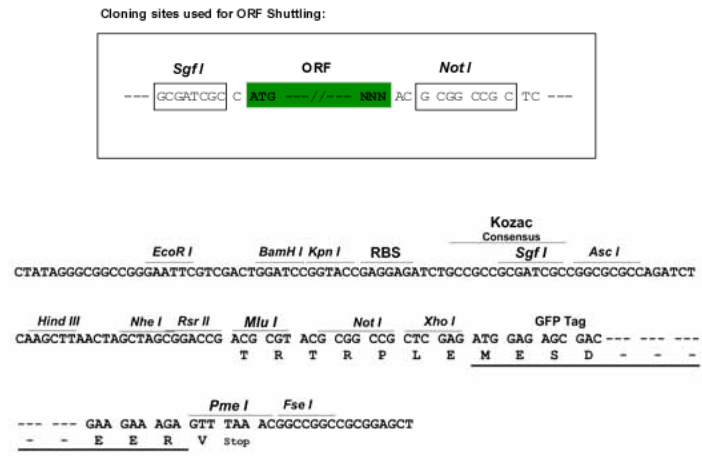
Protein Sequence: >RG211190 representing NM_001947
 Red=Cloning site Green=Tags(s)

MPCKSAEWLQEELEARGGASLLLLDCRPHELFESSHETAINLAIPGLMLRRLRKGNLPIRSIIPNHADK
 ERFATRCKAATVLLYDEATAEWQPEPGAPASVLLGLLQKLRDDGCQAYYLQGGFNKFQTEYSEHCETNVD
 SSSPSSPPTSVLGLGLLRISDCSDGESDRELPSSTATESDGSPVPSSQPAFPVQILPYLYLGCADKST
 NLDVLGKYGIKYILNVTPNLPNAFEHGGFTYKQIPI SDHWSQNL SQFFPEAISFIDEARSKKCGVLVHC
 LAGISRSVTVTVAYLMQKMNL SLNDAYDFV KRKKS NISPNFNF MGQLLDFERTLGLSSPCDNHASSEQLY
 FSTPTNHNLFPLNTLEST

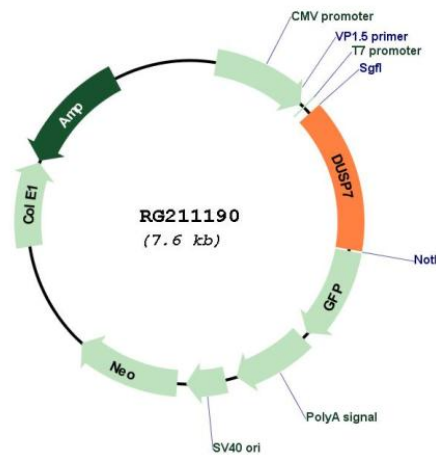
TRPLE - GFP Tag - V

Restriction Sites: Sgfl-NotI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001947

ORF Size:	1104 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:	<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:	NM_001947.2 , NP_001938.1
RefSeq Size:	1239 bp
RefSeq ORF:	1260 bp
Locus ID:	1849
UniProt ID:	Q16829
Cytogenetics:	3p21.2
Protein Families:	Druggable Genome, Phosphatase
Protein Pathways:	MAPK signaling pathway
Gene Summary:	Dual-specificity phosphatases (DUSPs) constitute a large heterogeneous subgroup of the type I cysteine-based protein-tyrosine phosphatase superfamily. DUSPs are characterized by their ability to dephosphorylate both tyrosine and serine/threonine residues. DUSP7 belongs to a class of DUSPs, designated MKPs, that dephosphorylate MAPK (mitogen-activated protein kinase) proteins ERK (see MIM 601795), JNK (see MIM 601158), and p38 (see MIM 600289) with specificity distinct from that of individual MKP proteins. MKPs contain a highly conserved C-terminal catalytic domain and an N-terminal Cdc25 (see MIM 116947)-like (CH2) domain. MAPK activation cascades mediate various physiologic processes, including cellular proliferation, apoptosis, differentiation, and stress responses (summary by Patterson et al., 2009 [PubMed 19228121]).[supplied by OMIM, Dec 2009]