

Product datasheet for **RG202878**

DUSP2 (NM_004418) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DUSP2 (NM_004418) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	DUSP2
Synonyms:	PAC-1; PAC1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG202878 representing NM_004418 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGGCTGGAGGCGGCGCGAGCTGGAGTGCGCGGCGCTGGGCACGCTGCTGCGGGATCCGCGGGAGG
CGGAACGCACGCTGCTGCTGGACTGCCGCCCTTCTGGCCTTCTGCCGGCGCCACGTGCGCGCCGCGCG
GCCAGTGCCTTGAACGCGCTGCTGCGGCGCCGCGCGCGGCCCTCTGCCGCCGTTCTCGCTGCCTG
CTGCCGACCGCGCGCTGCGGACGCGCTGGTCCGCGGGAGCTGGCGGGCCGTTGGTGTGGACGAGG
GCAGTGCCTCGGTGGCGGAGCTCCGGCCGACAGCCCGGCTCATGTGCTGCTGGCCGCGCTGCTGCACGA
GACCCGCGCGGGCCACTGCCGTGTAATTCCTGCGAGGAGGCTTCGACGGCTTCCAGGGCTGCTGTCCC
GATCTGTGCTCTGAGGCCCCCGCCCTGCGCTGCCGCAACAGGGGACAAAACCAGCCGCTCCGACTCCA
GGGCTCCTGTCTACGACCAGGGTGGCCCTGTGGAGATCTTGCCTACCTGTTCTGGGCAGCTGCAGTCA
CTCGTCAGACCTGCAGGGGCTGCAGGCCTGTGGCATCACAGCCGTCCTAACGTGTCGCCAGCTGCCCC
AACCACCTTGGAGGCTTTTCCGCTACAAGAGTATCCCTGTGGAGGACAACCAGATGGTGGAGATCAGTG
CCTGGTTCAGGAGGCCATAGGCTTCATTGACTGGGTGAAGAACAGCGGAGGCGGGTGTGGTGCAGTG
CCAGGCGGGTATCTCGCGCTCTGCCACCATCTGTCTGGCATACTCATGCAGAGTCGCCGTGTCGGCTG
GACGAGGCTTTGACTTCGTTAAGCAGCGCCGGGGGTATCTCCCCAACTTCAGTTTCATGGGGCAGC
TGCTGCAGTTTGAGACCCAGGTGCTGTGTAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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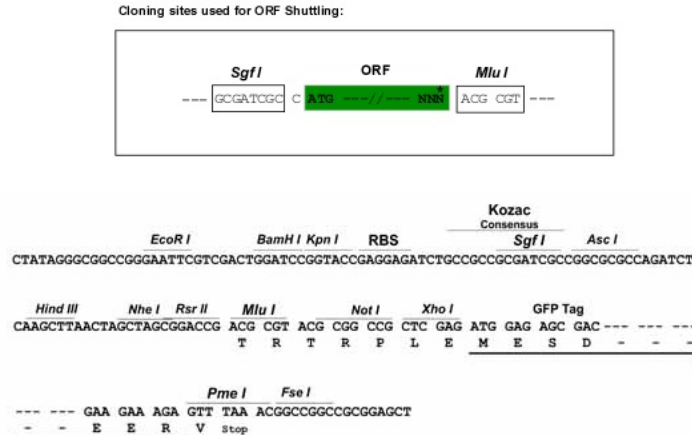
Protein Sequence: >RG202878 representing NM_004418
 Red=Cloning site Green=Tags(s)

MGLEAARELECAALGTLRLRDPREAERTLLLDCRPFLAFCRRHVRAARPVPWNALLRRRARGPPAAVLACL
 LPDRALRTRLVRGELARAVVLDGASVAELRPDSPAHLVLLAALLHETRAGPTAVYFLRGGFDGFGCCP
 DLCSEAPAPALPPTGDKTSRSDSRAPVYDQGGPVEILPYLFLGSCSHSSDLQGLQACGITAVLNVASCP
 NHFEGLFRYKSIPVEDNQMVETSAWFQEAIGFIDWVKNSGGRVLVHCQAGISRSATICLAYLMQSRVRRL
 DEAFDFVKQRRGVI SPNFSFMGQLLQFETQVLCH

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004418

ORF Size: 942 bp

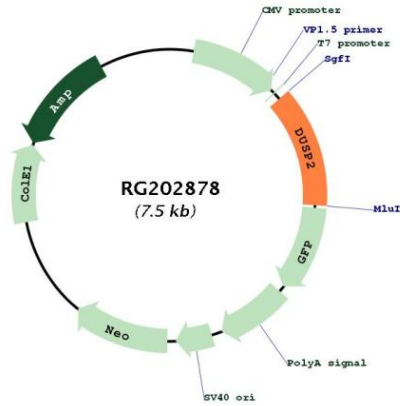
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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_004418.4</u>
RefSeq Size:	1702 bp
RefSeq ORF:	945 bp
Locus ID:	1844
UniProt ID:	<u>Q05923</u>
Cytogenetics:	2q11.2
Domains:	DSPc, RHOD, PTPc_motif
Protein Families:	Druggable Genome, Phosphatase
Protein Pathways:	MAPK signaling pathway
Gene Summary:	The protein encoded by this gene is a member of the dual specificity protein phosphatase subfamily. These phosphatases inactivate their target kinases by dephosphorylating both the phosphoserine/threonine and phosphotyrosine residues. They negatively regulate members of the mitogen-activated protein (MAP) kinase superfamily (MAPK/ERK, SAPK/JNK, p38), which are associated with cellular proliferation and differentiation. Different members of the family of dual specificity phosphatases show distinct substrate specificities for various MAP kinases, different tissue distribution and subcellular localization, and different modes of inducibility of their expression by extracellular stimuli. This gene product inactivates ERK1 and ERK2, is predominantly expressed in hematopoietic tissues, and is localized in the nucleus. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG202878