

Product datasheet for **RG205220**

DUSP1 (NM_004417) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DUSP1 (NM_004417) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	DUSP1
Synonyms:	CL100; HVH1; MKP-1; MKP1; PTPN10
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG205220 representing NM_004417 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTCATGGAAGTGGGCACCCTGGACGCTGGAGGCTGCGGGCGCTGCTGGGGAGCGAGCGGCCAAT
GCCTGCTGCTGGACTGCCGCTCCTTCTTCGTTTCAACGCCGGCCACATCGCCGGCTCTGTCAACGTGCG
CTTCAGCACCATCGTGGCGCCGGGCAAGGGCGCCATGGGCCTGGAGCACATCGTCCCAACGCCGAG
CTCCGCGGCCGCTGCTGGCCGGCGCTACCACGCCGTGGTGTGCTGGACGAGCGAGCGCCGCCCTGG
ACGGCGCAAGCGGACGCGACCCTGGCCCTGGCGCCGGCGCTCTGCCGCGAGGCGCGCCGCGCA
AGTCTTCTCCTCAAAGGAGGATACGAAGCGTTTTTCGGCTTCTGCCCGAGCTGTGCAGAAACAGTCCG
ACCCCATGGGGCTCAGCCTTCCCTGAGTACTAGCGTCCCTGACAGCGGGAATCTGGGTGCAGTTCTCT
GCAGTACCCACTCTACGATCAGGGTGGCCCGGTGAAATCCTGCCCTTCTGTACCTGGGCAGTGCGTA
TCACGTTCCCGCAAGGACATGCTGGATGCCTTGGGCATAACTGCCTTGATCAACGTCTCAGCCAATTGT
CCCAACCATTTTGAGGGTCACTACCAAGTACAAGAGCATCCCTGTGGAGGACAACCACAAGGCAGACATCA
GCTCCTGGTTCAACGAGGCCATTGACTTCATAGACTCCATCAAGAATGCTGGAGGAAGGGTGTGTGCA
CTGCCAGGCAGGCATTTCCCGTCCAGCCACCATCTGCCTTGTACCTTATGAGGACTAATCGAGTCAAG
CTGGACGAGGCCTTTGTGTTGTAAGCAGAGGCGAAGCATCATCTCCCAACTCAGTTCATGGGCC
AGCTGCTGAGTTTGTGCTCCAGGTGCTGGCTCCGCACTGTTCCGACAGAGGCTGGGAGCCCCGCCATGGC
TGTGCTCGACCGAGGCACCTCCACCACCACCGTGTCAACTTCCCGTCTCCATCCCTGTCCACTCCACG
AACAGTGCCTGAGCTACCTCAGAGCCCCATTACGACCTCTCCAGCTGC

ACCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG205220 representing NM_004417
 Red=Cloning site Green=Tags(s)

MYMEVGTLDAGGLRALLGERAAQCLLLDCRSFFAFNAGHIAGSVNVRVSTIVRRRAKGMGLEHIVPNAE
 LRGRLLAGAYHAVVLLDERSAALDGAKRDLALAAGALCREAAQVFLKGGYEAFSASCPCLCSKQS
 TPMGLSLPLSTSVPDSAESGSCSSTPL YDQGGPVEILPFLYLGSAYHASRKDMLDALGITALINVSANC
 PNHFEGHYQYKSIIPVEDNHKADISSWFNEAIDFIDSIKAGGRV FVHCQAGISRSATICLAYLMRTNRVK
 LDEAFEFVKQRRSII SPNFSFMGQLLQFESQVLAPHCSAEAGSPAMAVLDRGTSTTTVFNFVPSIPVHST
 NSALSYLQSPITTPSC

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004417

ORF Size: 1101 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_004417.2](#), [NP_004408.1](#)

RefSeq Size: 2015 bp

RefSeq ORF: 1104 bp

Locus ID: 1843

UniProt ID: [P28562](#)

Cytogenetics: 5q35.1

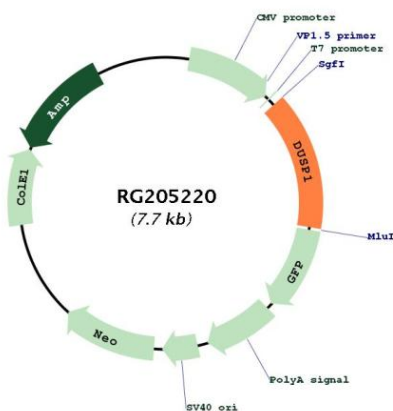
Domains: DSPc, RHOD, PTPc_motif

Protein Families: Druggable Genome, Phosphatase

Protein Pathways: MAPK signaling pathway

Gene Summary: The protein encoded by this gene is a phosphatase with dual specificity for tyrosine and threonine. The encoded protein can dephosphorylate MAP kinase MAPK1/ERK2, which results in its involvement in several cellular processes. This protein appears to play an important role in the human cellular response to environmental stress as well as in the negative regulation of cellular proliferation. Finally, the encoded protein can make some solid tumors resistant to both chemotherapy and radiotherapy, making it a target for cancer therapy. [provided by RefSeq, Aug 2017]

Product images:



Circular map for RG205220