

Product datasheet for **SC117410**

DUSP1 (NM_004417) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DUSP1 (NM_004417) Human Untagged Clone
Tag:	Tag Free
Symbol:	DUSP1
Synonyms:	CL100; HVH1; MKP-1; MKP1; PTPN10
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF:

>OriGene sequence for NM_004417 edited
 GAATTCGGCACGGGCGCAGAGAGACCCGGGGTCTAGCTTTTCCTCGAAAAGCGCCGCC
 TGCCCTTGGCCCCGAGAACAGACAAAGAGCACCAGGGCCGATCACGCTGGGGGCGCTG
 AGGCCGGCCATGGTCAATGGAAGTGGGCACCCTGGACGCTGGAGGCTGCGGGCGCTGCTG
 GGGGAGCGAGCGGCGCAATGCCTGCTGCTGGACTGCCGCTCCTTCTTCGTTTCAACGCC
 GGCCACATCGCCGGCTCTGTCAACGTGCGCTTCAGCACCATCGTGTGGCGCCGGCCAAG
 GCGCCATGGGCCTGGAGCACATCGTGCCCAACGCCGAGCTCCGGGGCCGCTGCTGGCC
 GCGCCTACCACGCCGTGGTGTGCTGGACGAGCGCAGCGCCGCCCTGGACGGCGCCAAG
 CGCAGCGCACCCCTGGCCCTGGCGGCGCGCGCTCTGCCGCGAGGCGCGCGCCGCGCAA
 GTCTTCTCCTCAAAGGAGGATACGAAGCGTTTTCGGCTTCTGCCCGGAGCTGTGCAGC
 AAACAGTCGACCCCCATGGGGCTCAGCCTTCCCCTGAGTACTAGCGTCCCTGACAGCGCG
 GAATCTGGGTGCAGTTCCTGCAGTACCCACTCTACGATCAGGGTGGCCCGTGGAAATC
 CTGCCCTTCTGTACCTGGCAGTGCATCACGCTTCCCGAAGGACATGCTGGATGCC
 TTGGGCATAACTGCCTTGATCAACGTCTCAGCCAATTGCCAACCATTTTGAGGGTCAC
 TACCAGTACAAGAGCATCCCTGTGGAGGACAACCAAGGCAGACATCAGCTCCTGGTTC
 AACGAGGCCATTGACTTCATAGACTCCATCAAGAATGCTGGAGGAAGGGTGTGTGCCAC
 TGCCAGGCAGGCATTTCCCGGTAGCCACCATCTGCCTTGCTTACCTTATGAGGACTAAT
 CGAGTCAAGCTGGACGAGGCCTTTGAGTTTGTGAAGCAGAGGCGAAGCATCATCTCTCC
 AACTTCAGCTTCATGGCCAGCTGCTGCAGTTTGTAGTCCCAGGTGCTGGCTCCGCACTGT
 TCGGCAGAGGCTGGGAGCCCCGCATGGCTGTGCTCGACCGAGGCACCTCCACCACCACC
 GTGTTCAACTTCCCCGTCTCCATCCCTGTCCACTCCACGAACAGTGCCTGAGCTACCT
 CAGAGCCCCATTACGACCTCTCCAGCTGCTGAAAGGCCACGGGAGGTGAGGCTCTTAC
 ATCCCATTGGGACTCCATGCTCCTTGAGAGGAGAAATGCAATAACTCTGGGAGGGCTCG
 AGAGGGCTGGTCTTATTTATTTAACTTACCCGAGTTCTCTGGGTTTCTAAGCAGTTA
 TGGTGATGACTTAGCGTCAAGACATTTGCTGAACTCAGCACATTCGGGACCAATATATAG
 TGGGTACATCAAGTCCATCTGACAAAATGGGGCAGAAGAGAAAGGACTCAGTGTGTGATC
 CGGTTTCTTTTGTCTCGCCCTGTTTTTGTAGAATCTCTTATGCTTGACATACCTACC
 AGTATTATTTCCGACGACACATATACATATGAGAATATACCTATTTATTTTGTGTAGG
 TGTCTGCCTTACAAATGTCATTGTCTACTCCTAGAAGAACCAATACCTCAATTTTTGT
 TTTTGTACTGTACTATCCTGTAATATATCTTAAGCAGGTTTGTTCAGCACTGATG
 GAAAATACCAGTGTGGGTTTTTTTTAGTTGCCAACAGTTGTATGTTTGTGATTATTT
 ATGACCTGAAATAATATATTTCTTCTTCTAAGAAGACATTTTGTACATAAGGATGACTT
 TTTTATACAATGGAATAAATTATGGCATTCTATTGAAAAAAAAAAAAAAAAAAAAAAAAA
 AAAAAAACTCGAC

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_004417 unedited
 CAAAATTGTATACGACTACTATAGGGCGCCGGAATTCGCACGGGCGCAGAGAGACCC
 GGGGTCTAGCTTTTCCTCGAAAAGCGCCGCCCTGCCCTTGGCCCCGAGAACAGACAAAGA
 GCACCGCAGGGCCGATCACGCTGGGGGCGCTGAGGCCGGCCATGGTCAATGGAAGTGGGCA
 CCCTGGACGCTGGAGGCTGCGGGCGCTGCTGGGGAGCGAGCGGCGCAATGCCTGCTGC
 TGGACTGCCGCTCCTTCTTCGTTTCAACGCCGGCCACATCGCCGGCTCTGTCAACGTGC
 GCTTCAGCACCATCGTGTGGCGCCGGCCAAGGGCGCCATGGGCCTGGAGCACATCGTGC
 CCAACGCCGAGCTCCGCGGCCCTGCTGGCCGGCGCCTACCACGCCGTGGTGTGCTGG
 ACGAGCGCAGCGCCCTGGACGGCGCAAGCGCGACGGCACCTGGCCCTGGCGGCCG
 GCGCGCTCTGCCGAGGCGCGCGCCGCAAGTCTTCTCCTCAAAGGAGGATACGAAG
 CGTTTTCGGCTTCTGCCGGAGCTGTGACGAACAGTCGACCCCCATGGGGCTCAGCC
 TTTCCCTGAGTACTAGCGTCCCTGACAGCGGGAATCTGGGTGCAGTTCTTCGAGTACCC
 CACTCTACGATCAGGGTGGCCCGGTGGAATCCTGCCCTTCTGTACCTGGGCGAGTGCCT
 ATCACGCTTCCCAGGACATGCTGGATGCCTTGGCATAACTGCCTTGATCAACGTCTCA
 GCCAATTGTCCCACATTTTGGGGTCACTACCAGTACAGAGCATCCCGGTGGGAGACAC
 CCCCAGCAGACTCAGCTCCTGGTTAACGAGCCATTGACTCATAACTCATCAGAGCTGAG
 GAAAGGGGGTGGTCCACTGCAGCAGCATTN

3' Read Nucleotide Sequence:	>OriGene 3' read for NM_004417 unedited AATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTCCAATAAAAAATGCCA TAATTTATTCCATTGTATAAAAAAGTCATCCTTATGTAACAAAATGTCTTCTTAAAAAAA AAAATATATTATTTTCAGGTCATAAATAATCAGCAAACATACAACCTGTTGGCAACTAAAAA AAAACCAACTGGTATTTCCATCAGGGCTGAAAACAACTGCTTAAAAATATATTTA CAGGATAGTACAGTCCTCAAAAACAAAAATTGAGGTATTTGGTTCTTCTAGGAGTAAACA ATGACATTTGTGAAGCAAACCCCTACACAAAAATAAATAAGGTATATTTCATATGTAT ATGGGCCCGCGGAATAATACTGGTAGGTATGTCAAGCATGAAAAGATTCTACAAAAAAC AGGGGCGAGCAAAAAGAAACCGGATCACACACTGAGTCCTTTCTTCTGCCCATTTTG TCAAAATGGACTTGATGTACCCACTATATATTGGTCCCGAATGTGCTGAGTTCAGCAAATG TCTTGACGCTAAGTCATCACCATAACTGCTTAGAAACCCAGAGGAACTCGGGTGAAGTTA AATAAATAAGGACCAGCCCTCTAGAGCCCTTCCCAGATTATTGCATTTCTCTCTCAAGA GCATGGAGTCCCAATGGGATGTGAAGAGCCTCACCTCCCGTGGCCTTTCANCAGCTGGGA AAAGTCTAATGGGCTCTGAAGGTANCTCACCCCTTGTCTGGAGTGAACAGGGAT GGAACCGGAANTTAACANCGGGTGGTGGAGGTCTTCGTCCAACCAGCCTGCGGGCT CCCACCTTTGCCAAAGTGCGAACCACACCTGGACTTAATGCNACACTGCCATGAATTA TTGGGAAATTATCTCTCTTGTAAAAATAAAGGCTTGCCACTTCTCCATATCCCTAAG GAACAAGCAAATGGGCTACCGAAATCCTCTGAATG
Restriction Sites:	NotI-NotI
ACCN:	NM_004417
Insert Size:	1104 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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_004417.2</u> , <u>NP_004408.1</u>
RefSeq Size:	2015 bp
RefSeq ORF:	1104 bp
Locus ID:	1843
UniProt ID:	<u>P28562</u>
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]