

Product datasheet for RC211190L3

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OriGene Technologies, Inc.

DUSP7 (NM_001947) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: DUSP7 (NM 001947) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: DUSP7

Synonyms: MKPX; PYST2

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

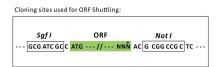
E. coli Selection: Chloramphenicol (34 ug/mL)

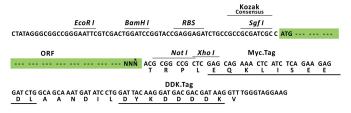
ORF Nucleotide The ORF insert of this clone is exactly the same as(RC211190).

Sequence:

Restriction Sites: Sgfl-Notl

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF.

ACCN: NM_001947

ORF Size: 1104 bp





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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: <u>NM 001947.2</u>, <u>NP 001938.1</u>

 RefSeq Size:
 3248 bp

 RefSeq ORF:
 1260 bp

 Locus ID:
 1849

 UniProt ID:
 Q16829

Cytogenetics: 3p21.2

Protein Families: Druggable Genome, Phosphatase

Protein Pathways: MAPK signaling pathway

MW: 40.6 kDa

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]