

## Product datasheet for RC200640L2

### DUSP4 (NM\_001394) Human Tagged Lenti ORF Clone

#### Product data:

|                           |  |
|---------------------------|--|
| Product Type:             | Expression Plasmids  |
| Product Name:             | DUSP4 (NM_001394) Human Tagged Lenti ORF Clone                 |
| Tag:                      | mGFP   |
| Symbol:                   | DUSP4  |
| Synonyms:                 | HVH2; MKP-2; MKP2; TYP   |
| Mammalian Cell Selection: | None   |
| Vector:                   | pLenti-C-mGFP (PS100071)                                       |
| E. coli Selection:        | Chloramphenicol (34 ug/mL)                                     |
| ORF Nucleotide Sequence:  | The ORF insert of this clone is exactly the same as(RC200640). |
| Restriction Sites:        | SgfI-MluI  |
| Cloning Scheme:           |  |

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF.

|           |           |
|-----------|-----------|
| ACCN:     | NM_001394 |
| ORF Size: | 1182 bp   |



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**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](mailto: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:**

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\\_001394.5](#)

**RefSeq Size:** 5625 bp

**RefSeq ORF:** 1185 bp

**Locus ID:** 1846

**UniProt ID:** [Q13115](#)

**Cytogenetics:** 8p12

**Domains:** DSPc, RHOD, PTPc\_motif

**Protein Families:** Phosphatase

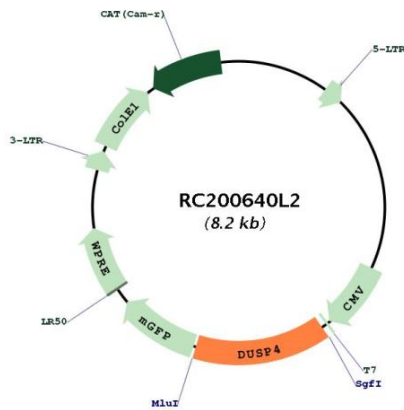
**Protein Pathways:** MAPK signaling pathway

**MW:** 43 kDa

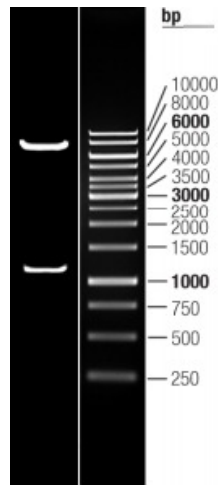
**Gene Summary:**

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, ERK2 and JNK, is expressed in a variety of tissues, and is localized in the nucleus. Two alternatively spliced transcript variants, encoding distinct isoforms, have been observed for this gene. In addition, multiple polyadenylation sites have been reported. [provided by RefSeq, Jul 2008]

**Product images:**



Circular map for RC200640L2



Double digestion of RC200640L2 using SgfI and MluI