



# Recombinant Mouse Dual specificity protein phosphatase 10 (Dusp10)

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| <b>Product Code</b>      | CSB-EP866848MO-B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Abbreviation</b>      | Dusp10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Storage</b>           | The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.<br>Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.                                                                                                                                                                                                                                                                                             |
| <b>Uniprot No.</b>       | Q9ESS0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Product Type</b>      | Recombinant Protein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Immunogen Species</b> | Mus musculus (Mouse)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Purity</b>            | >85% (SDS-PAGE)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Sequence</b>          | MPPSPLDDRV VVALSRPVRP QDLNLCLDSS YLGASPGSG SHAPVLATAV<br>VTLKAANLTY MPSSSGSARS LNCGCSSTSC CTVATYDKDH QAQTQAI AAG<br>TATTAIGTST TCPANQMVNN NENTGSVLSP SGGVGSPVSG TPKQLASIKI<br>IYPNDLAKKM TKCSKSHLPS QGPVIIDCRP FMEYNKSHIQ GAVHINCADK<br>ISRRRLQQGK ITVLDLISCR EGKDSFKRIF SKEIIVYDEN TNEPSRVTPS<br>QPLHIVLESL KREGKEPLVL KGGLSSFKQN HGNLCDNSLQ LQECREVGGG<br>ASAASSMLPQ SVPTTPDIEN AELTPILPFL FLGNEQDAQD LDTMQRLNIG<br>YVINVTTHLP LYHYEKGLFN YKRLPATDSN KQNLQRQYFEE AFEFIEEAHQ<br>CGKGLLIHCQ AGVSRSATIV IAYLMKHTRM TMTDAYKFVK GKRPIISPNL<br>NFMGQLLEFE EDLNGVTPR ILTPKLMGME TVV |
| <b>Source</b>            | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Target Names</b>      | Dusp10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Protein Names</b>     | Recommended name: Dual specificity protein phosphatase 10 EC= 3.1.3.16<br>EC= 3.1.3.48 Alternative name(s): Mitogen-activated protein kinase<br>phosphatase 5 Short name= MAP kinase phosphatase 5 Short name= MKP-5                                                                                                                                                                                                                                                                                                                                                           |
| <b>Expression Region</b> | 1-483                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Notes</b>             | Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Tag Info</b>          | Tag type will be determined during the manufacturing process.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Protein Length</b>    | full length protein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Target Details</b>    | Dual specificity protein phosphatases inactivate their target kinases by dephosphorylating both the phosphoserine/threonine and phosphotyrosine residues. They negatively regulate members of the MAPK superfamily (MAPK/ERK, SAPK/JNK, p38), which is associated with cellular proliferation and differentiation. Different members of this family of dual specificity phosphatases show distinct substrate specificities for MAPKs, different tissue distribution and subcellular localization, and different modes of inducibility of their expression by                   |



extracellular stimuli. This gene product binds to and inactivates p38 and SAPK/JNK, but not MAPK/ERK. Its subcellular localization is unique; it is evenly distributed in both the cytoplasm and the nucleus. This gene is widely expressed in various tissues and organs, and its expression is elevated by stress stimuli. Three transcript variants encoding two different isoforms have been found for this gene.

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**Reconstitution**

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

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**Shelf Life**

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.