

Product datasheet for MR204628

Dusp7 (BC010207) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dusp7 (BC010207) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Dusp7
Synonyms:	MKPX, MKP-X, PYST2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR204628 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTGCGCCGCTGCGCAAAGGCAACCTGCCATCCGCTCCATCATTCCCAACCATGCCACAAGGAGC
GCTTCGCCACGCGCTGCAAGGCGGCCACCGTGCTCTACGACGAGGCCACGGCGAGTGGCAGCCCGA
GCCCGGCCCGCCCGCTCCGTTCTCGGCTGCTCCTGCAGAAGCTGCGAGACGACGGCTGCCAGGCCTAC
TACCTCAAGGTGGTTTCAACAAGTTCAGACGGAATACTCTGAGCATTGTGAGACTAACGTGGACAGCT
CGTCCTCCCGAGTGGCTCGCCACCCACCTCCGTGCTGGGCTGGGGGCTGCGCATCAGCTCTGACTG
CTCAGACGGCGAGTCGGACCGAGAGCTGCCAGCAGTGCCACTGAGTCGGATGGCAGCCCTGTACCATCC
AGCCAGCCGGCCTTCCGGTCCAGATCCTGCCCTACCTCTACCTCGGCTGTGCCAAGGACTCTACCAACC
TGGATGTACTTGCAAATACGGCATCAAATACATCCTCAACGTCACACCAACCTGCCAACGCCTTTGA
GCACGGTGGTGTGAGTTCACCTACAAGCAAATCCCATCTCTGACCACTGGAGCCAGAACCTCTCTCAGTTC
TTCCCGAGGCCATCAGCTTCATTGATGAAGCCCGCTCCAAGAAGTGTGGTGTCTTGGTGCAGTGCCTAG
CAGGCATCAGCCGTTCACTGACAGTACTGTAGCCTACCTGATGCAGAAGATGAACCTGTCCCTCAATGA
TGCCTATGACTTCGTCAAGAGGAAAAAGTCTAACATCTCGCCAACTTCAACTTCATGGGCGAGCTGCTG
GACTTTGAGCGGACGCTGGGGCTCAGCAGCCCATGCGACAACCACGCCAGTGCAGCTCTACTTCT
CCAGCCCCACCAACCATAACCTGTTCCCGATCAACACGCTCGAGTCCACG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR204628 protein sequence
 Red=Cloning site Green=Tags(s)

MLRRLRKGNLPIRSIIPNHADKERFATRCKAATVLLYDEATAEWQPEPGAPASVLGLLLQKLRDDGCQAY
 YLQGGFNKFQTEYSEHCETNVDSSSSPSGSPPTSVLGLGLRISSDCSDGESDRELPSSATESDGSVPVS
 SQPAPFPVQILPYLYLGCAKDSTNLDVLGKYGIKYLNVTPNLPNAFEHGGFTYKQIPISDHWSQNL SQF
 FPEAISFIDEARSKKCGVLVHCLAGISRSVTVTVAYLMQKMNLSLNDAYDFVKRKKSNISPNFNFMGQLL
 DFERTLGLSSPCDNHAPSEQLYFSTPTNHNLFINTLEST

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: BC010207

ORF Size: 960 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: [BC010207](#), [AAH10207](#)

RefSeq Size: 2584 bp

RefSeq ORF: 962 bp

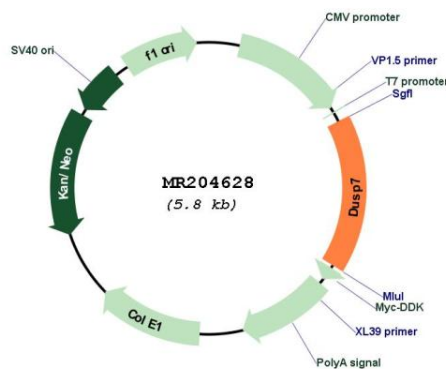
Locus ID: 235584

Cytogenetics: 9 F1

MW: 35.3 kDa

Gene Summary: Dual specificity protein phosphatase (PubMed:27783954). Shows high activity towards MAPK1/ERK2 (By similarity). Also has lower activity towards MAPK14 and MAPK8 (By similarity). In arrested oocytes, plays a role in meiotic resumption (PubMed:27783954). Promotes nuclear envelope breakdown and activation of the CDK1/Cyclin-B complex in oocytes, probably by dephosphorylating and inactivating the conventional protein kinase C (cPKC) isozyme PRKCB (PubMed:27783954). May also inactivate PRKCA and/or PRKCG (PubMed:27783954). Also important in oocytes for normal chromosome alignment on the metaphase plate and progression to anaphase, where it might regulate activity of the spindle-assembly checkpoint (SAC) complex (PubMed:27783954).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR204628