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Product datasheet for MR208000

Ppp5c (NM_011155) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ppp5c (NM_011155) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ppp5c
Synonyms:	AU020526; PP5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR208000 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGATGGCGGAGGGCGAGCGGACTGAGTGTGCTGAGACCCCCCGGGACGAACCCCCGGCCGATGGCG
CTCTGAAGCGGGCAGAGGAGCTCAAGACACAGGCCAACGACTACTTCAAAGCCAAGGACTACGAGAACGC
GATCAAGTTCTACAGTCAGGCCATCGAGTTGAACCCCGGCAATGCCATCTACTATGGCAACCGCAGCCTG
GCCTACCTGCGCACTGAGTGCTATGGCTATGCACTGGGCGACGCCACACGGGCCATCGAGCTTGACAAGA
AGTACATCAAAGGCTACTACCGCCGGGCGGCCAGCAACATGGCACTGGGCAAGTTCCGGGCTGCCCTGCG
TGACTACGAGACGGTGGTGAAAGTGAAGCCTAATGACAAGGATGCCAAGATGAAGTACCAGGAGTGCAGC
AAGATTGTGAAGCAGAAGGCCTTTGAGAGGGCCATTGCAGGTGACGAGCACAGACGCTCTGTCGTGGACT
CTCTGGACATTGAAAGCATGACCATTGAAGATGAGTACAGCGGGCCCAAGCTTGAGGATGGCAAAGTGAC
AATCACCTTCATGAAAGACCTCATGCAGTGGTACAAGGATCAGAAGAAACTGCACCGGAAGTGCGCCTAC
CAGATCCTAGTACAGGTGAAAGAAGTCCTCTGCAAGCTGAGCACGCTGGTGGAGACGACGCTGAAAGAGA
CAGAGAAGATTACAGTGTGCGGGGACACCCATGGCCAGTTCTACGACCTCCTCAACATATTTGAGCTCAA
CGGTTTACCCTCAGAGACCAACCCCTATATATTTAATGGCGATTTTGTGGACCGTGGTTCCTTCTCCGTT
GAAGTGATCCTCACCCTCTTCGGCTTTAAGCTCCTGTATCCAGATCATTTCCATCTACTTCGAGGCAACC
ACGAGACAGACAACATGAACCAGATCTACGGGTTCGAGGGCGAGGTGAAGGCCAAGTACACAGCCCAGAT
GTATGAGCTCTTCAGCGAGGTGTTCGAGTGGCTTCCGCTGGCGCAGTGTATCAATGGCAAAGTGCTGATC
ATGCACGGAGGCCTATTCAGCGAAGATGGTGTCACTCTGGATGACATCCGAAAGATTGAGCGGAATCGGC
AGCCCCCAGACTCAGGTCCCATGTGTGACCTGCTGTGGTCAGATCCCCAGCCACAGAATGGGCGCTCCGT
CAGCAAGCGTGGTGTGAGTTGCCAGTTTGGGCCTGATGTCACCAAGGCCTTCCTGGAGGAGAATCAACTG
GACTATATCATCCGCAGCCATGAAGTCAAAGCCGAGGGCTACGAGGTGGCCCATGGTGGCCGCTGTGTCA
CTGTCTTTTCTGCCCCCAACTATTGTGACCAGATGGGAAACAAAGCCTCCTACATCCACCTCCAGGGCTC
CGACCTGCGGCCCCAGTTCCACCAATTCACAGCAGTGCCTCACCCCAATGTCAAGCCCATGGCATACGCC
AACACGCTTCTGCAGCTAGGAATGATG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

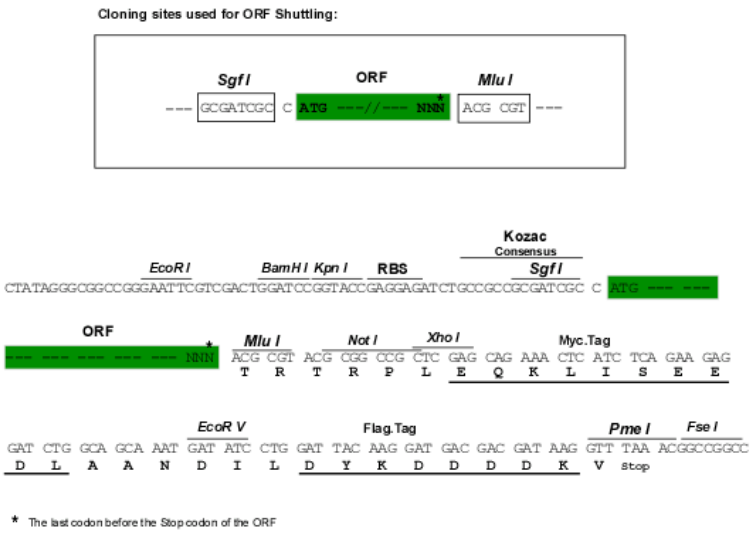
>MR208000 protein sequence
Red=Cloning site Green=Tags(s)

MAMAEGERTECAETPRDEPPADGALKRAEELKTQANDYFKAKDYENAIKFYSQAIELNPGNAIYYGNRSL
AYLRTECYGYALGDATRAIELDKKYIKGYYRRAASNMALGKFRAALRDYETVVKVKPNDKDAKMKYQECS
KIVKQKAFERAIAGDEHRRSVVDSLDIESMTIEDEYSGPKLEDGKVTITFMKDLMQWYKDQKKLHRKCAY
QILVQVKEVLCKLSTLVETTLKETEKITVCGDTHGQFYDLLNIFELNGLPSETNPYIFNGDFVDRGSFSV
EVILTLFGFKLLYPDHFHLLRGNHETDNMNQIYGFEGEVKAKYTAQMYELFSEVFEWLPLAQCINGKVLI
MHGGLFSEDGVTLDDIRKIERNRQPPDSGPMCDLLWSDPQPQNGRSVSKRGVSCQFGPDVTKAFLEENQL
DYIIRSHEVKAEGYEVAHGGRCVTVFSAPNYCDQMGNKASYIHLQGSDLRPQFHQFTAVPHPNVKPMAYA
NTLLQLGMM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_011155

ORF Size: 1500 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: NM_011155.1, NP_035285.1

RefSeq Size: 2084 bp

RefSeq ORF: 1500 bp

Locus ID: 19060

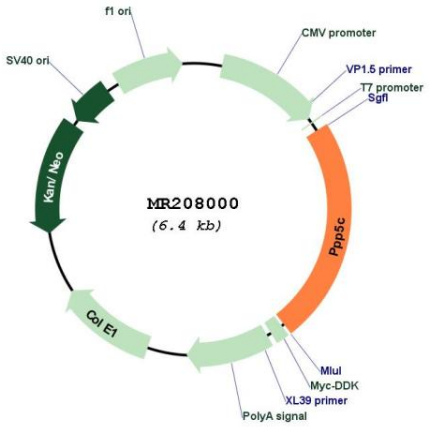
UniProt ID: Q60676

Cytogenetics: 7 9.15 cM

MW: 56.8 kDa

Gene Summary: Serine/threonine-protein phosphatase that dephosphorylates a myriad of proteins involved in different signaling pathways including the kinases CSNK1E, ASK1/MAP3K5, PRKDC and RAF1, the nuclear receptors NR3C1, PPARG, ESR1 and ESR2, SMAD proteins and TAU/MAPT. Implicated in wide ranging cellular processes, including apoptosis, differentiation, DNA damage response, cell survival, regulation of ion channels or circadian rhythms, in response to steroid and thyroid hormones, calcium, fatty acids, TGF-beta as well as oxidative and genotoxic stresses. Participates in the control of DNA damage response mechanisms such as checkpoint activation and DNA damage repair through, for instance, the regulation ATM/ATR-signaling and dephosphorylation of PRKDC and TP53BP1. Inhibits ASK1/MAP3K5-mediated apoptosis induced by oxidative stress. Plays a positive role in adipogenesis, mainly through the dephosphorylation and activation of PPARG transactivation function. Also dephosphorylates and inhibits the anti-adipogenic effect of NR3C1. Regulates the circadian rhythms, through the dephosphorylation and activation of CSNK1E. May modulate TGF-beta signaling pathway by the regulation of SMAD3 phosphorylation and protein expression levels. Dephosphorylates and may play a role in the regulation of TAU/MAPT. Through their dephosphorylation, may play a role in the regulation of ions channels such as KCNH2. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR208000