

Product datasheet for MR222149

Cps1 (NM_001080809) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cps1 (NM_001080809) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cps1
Synonyms:	4732433M03Rik; C; CPS; D1Ucl; D1Ucla3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR222149 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGACGAGGATTTTGACAGCTTGCAAAGTGGTGAAGACCCTGAAGAGTGGCTTTGGTTTTGCCAATGTGA
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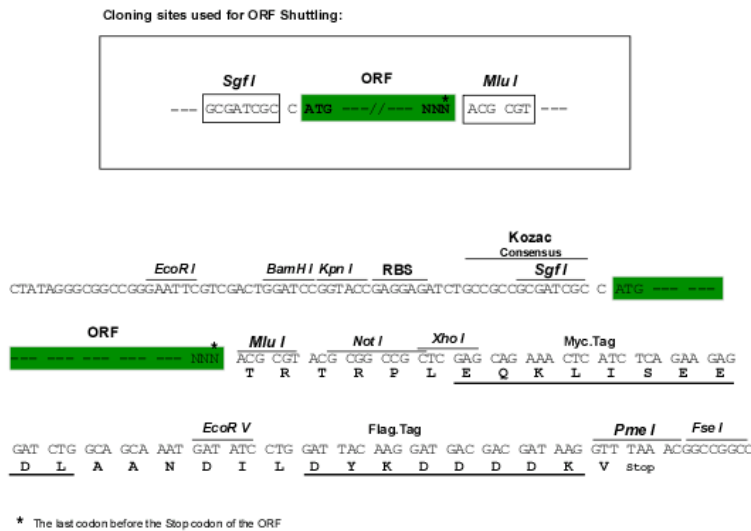
Protein Sequence: >MR222149 protein sequence
 Red=Cloning site Green=Tags(s)

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 NHWLATKSLGQWLQEEKVPAIYGV DTRMLTKIIRDKGTMLGKIEFEGQSVDFVDPNKQNLIAEVSTKDVK
 VFGKGNPTKVVAVDCGIKNNVIRLLVKRGAEVHLVPWNHDF T QMEYDGLLIAGGPGN PALAQPLIQNVKK
 ILESDRKEPLFGISTGNIITGLAAGAKSYKMSMANRGQNQPVLNITNRQAFITAQNHGYALDNTLPAGWK
 PLFVNVDQ TNEGIMHESKPF FAVQFHPEVSPGPTDTEYLFDSFFSLIKKGKGT TITSVLPK PALVASRV
 EVSKVLILGSGGLSIGQAGEFDYSGSQAVKAMKEENVKTVLMNPNIASVQTNEVGLKQADAVYFLPITPQ
 FVTEVIKAERPDGLILGMGGQTALNCGVELFKRGVLKEYGVKVLGTSVESIMATEDRQLFSDKLNEINEK
 IAPSF AVESMEDALKAADTIGYPMIRSAYALGGLGSGICPNKETLIDLGTKAFAMTNQILVERSVTGWK
 EIEYEVVRDADDNCVTVCNMENV DAMGVHTGDSVVVAPAQ TLSNAEFQMLRRTSVNVVRHLGIVGECNIQ
 FALHPTSMEYCIIEVNARLSRSSALASKATGYPLAFIAAKIALGIPLPEIKNVVSGKTSACFEP SLDYMV
 TKIPRWDLDRFHGTSSRIGSSMKSVGEVMAIGRTFEESFQKALRMCHPSVDGFTPR LPMNK EWPANLDLK
 KELSEPSSTRIYAIKALENNMSLDEIVRLT SIDKWFLYKMRDILNMDKTLKGLNDSVTEETLRKAKEI
 GFSDKQISKCLGLTEAQTRELRLKKNIHPWVKQIDTLAAEYPSVTNYLYVTYNGQEHDIKFDEHGIMVLG
 CGPYHIGSSVEFDWCAVSSIRTLRQLGKKT VVVVNCNPETVSTDFDECDKLYFEELSLERILDIYHQEACN
 GCIIISVGGQIPNNLAVPLYKNGVKIMGTSPLQIDRAEDRSIFSAVLDELKVAQAPWKA VNTLNEALEFAN
 SVGYPCLLRPSYVLSGSAMNVV FSEDEMKRFL EEA TRVSQEHPPVLT K FVEGAREVEMDAVGKEGRVISH
 AISEHVEDAGVHSGDATLMLPTQ TISQGAIEKVKDATRKIAKAF AISGPFNVQFLVKGNDVLVIECNLRA
 SRSFPFVSKTLGVDFIDVATKVMIGESIDEKRLPTLEQPIIPSDYVAIKAPMFSWPRLRDADPILRCEMA
 STGEVACFGEGIHTAFLKAMLSTGFKIPQKGILIGIQQSF RPRFLGVAEQ LHN EGFKLFATEATSDWLN A
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 KLF AEAVQKSR T VDSKSLFHYRQYSAGKAA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001080809

ORF Size: 4503 bp

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 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_001080809.2](#), [NP_001074278.1](#)

RefSeq Size: 5585 bp

RefSeq ORF: 4503 bp

Locus ID: 227231

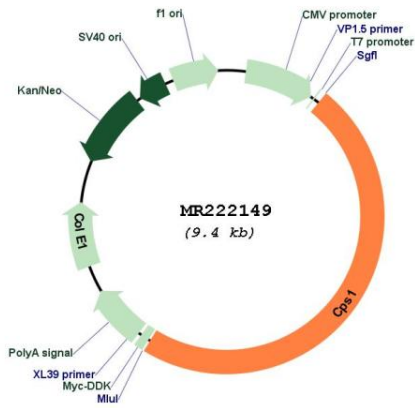
UniProt ID: [Q8C196](#)

Cytogenetics: 1 33.75 cM

MW: 164.6 kDa

Gene Summary: This gene encodes a protein localized to the inner mitochondrial matrix. The encoded protein plays a role in the detoxification of ammonia by catalyzing the first step in the urea cycle in which carbonyl-phosphate is synthesized from ammonia and bicarbonate. Carbamoyl-phosphate is subsequently converted to urea that is excreted by the kidneys. Deficiency of the encoded enzyme leads to an accumulation of ammonia in the blood. High levels of ammonia are toxic to the central nervous system and result in neurological disorders. [provided by RefSeq, Oct 2013]

Product images:



Circular map for MR222149