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Product datasheet for RC208485

MOCS2 (NM_004531) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MOCS2 (NM_004531) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MOCS2
Synonyms:	MCBPE; MOCO1; MOCODB; MPTS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC208485 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCGAGCTTGGAGATCAGCTCCTCGTGCTTCAGCCTGGAGACGAAATTGCCGTTATCCCCCCCATTAG
TGGAGGATAGTGCTTTTGAGCCATCTAGGAAAGATATGGATGAAGTTGAAGAGAAATCTAAAGATGTTAT
AAACTTTACTGCCGAGAAACTTTCAGTAGATGAAGTCTCACAGTTGGTGATTTCTCCGCTCTGTGGTGCA
ATATCCCTATTTGTAGGGACTACAAGAAATAACTTTGAAGGGAAAAAAGTCATTAGCTTAGAATATGAAG
CATATCTACCCATGGCGGAAAATGAAGTCAGAAAGATTTGTAGTGACATTAGGCAGAAATGGCCAGTCAA
ACACATAGCAGTGTTCCATAGACTTGGCTTGGTTCCAGTGTCAGAAGCAAGCATAATCATTGCTGTGTCC
TCAGCCCACAGAGCTGCATCTCTTGAAGCTGTGAGCTATGCCATTGATACTTTAAAAGCCAAGGTGCCCA
TATGGAAAAAGGAAATATACGAAGAGTCATCAACTTGGAAAGGAAACAAAGAGTGCTTTTGGGCATCCAA
CAGT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC208485 protein sequence
Red=Cloning site Green=Tags(s)

MSSLEISSSCFSLETKLPLSPPLVEDSAFEPSRKDMDEVEEKSKDVINFTAEKLSVDEVSQLVISPLCGA
ISLFVGTTRNNFEGKKVISLEYEAYLPMAENEVRKICSDIRQKWPVKHIAVFHRLGLVPVSEASIIIAVS
SAHRAASLEAVSYAIDTLKAKVPIWKKEIYEESSTWKGNKECFWASNS

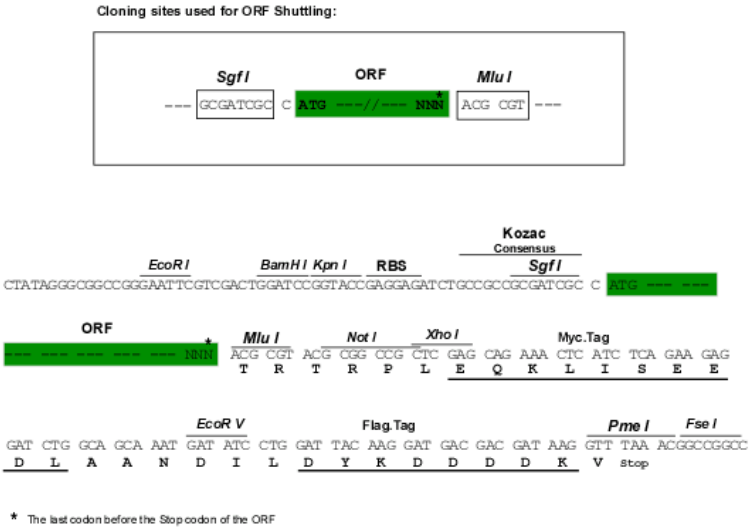
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

View online »

Chromatograms: https://cdn.origene.com/chromatograms/mk6349_e01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004531

ORF Size: 564 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_004531.5

RefSeq Size: 4200 bp

RefSeq ORF: 567 bp

Locus ID: 4338

UniProt ID: O96007

Cytogenetics: 5q11.2

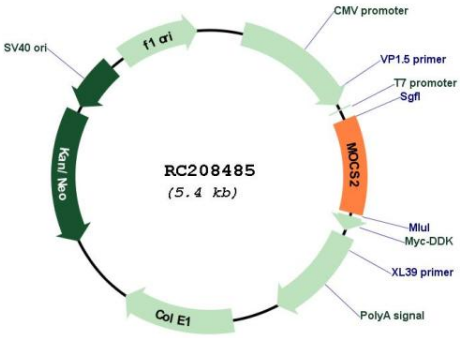
Domains: MoaE

Protein Families: Druggable Genome

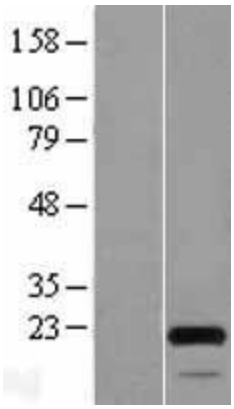
MW: 20.9 kDa

Gene Summary: Eukaryotic molybdoenzymes use a unique molybdenum cofactor (MoCo) consisting of a pterin, termed molybdopterin, and the catalytically active metal molybdenum. MoCo is synthesized from precursor Z by the heterodimeric enzyme molybdopterin synthase. The large and small subunits of molybdopterin synthase are both encoded from this gene by overlapping open reading frames. The proteins were initially thought to be encoded from a bicistronic transcript. They are now thought to be encoded from monocistronic transcripts. Alternatively spliced transcripts have been found for this locus that encode the large and small subunits. [provided by RefSeq, Jul 2008]

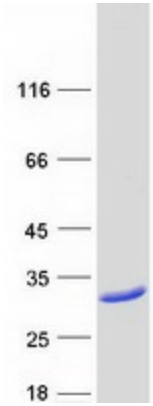
Product images:



Circular map for RC208485



Western blot validation of overexpression lysate (Cat# [LY417924]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208485 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MOCS2 protein (Cat# [TP308485]). The protein was produced from HEK293T cells transfected with MOCS2 cDNA clone (Cat# RC208485) using MegaTran 2.0 (Cat# [TT210002]).