

Product datasheet for **RC206067**

Cysteine Dioxygenase Type 1 (CDO1) (NM_001801) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cysteine Dioxygenase Type 1 (CDO1) (NM_001801) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cysteine Dioxygenase Type 1
Synonyms:	CDO-I
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC206067 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAACAGACCGAAGTCTGAAGCCACGGACCCTGGCTGATCTGATCCGCATCTGCACCAGCTCTTTG
CCGGCGATGAGGTCAATGTAGAGGAGGTGCAGGCCATCATGGAAGCCTACGAGAGCGACCCACCGAGTG
GGCAATGTACGCAAGTTCGACCAGTACAGGTATACCCGAAATCTGTGGATCAAGGAAATGGAAAATTT
AATCTGATGATTCTCTGTTGGGGTGAAGGACATGGCAGCAGTATTCATGATCATACCAACTCCCCTGCT
TTCTGAAGATGCTACAGGAAATCTAAAGGAGACATTATTTGCCTGGCCTGACAAAAATCCAATGAGAT
GGTCAAGAAGTCTGAAAGAGTCTTGAGGGAAAACCAAGTGTGCCTACATCAATGATTCCGTTGGCTTACAT
CGAGTAGAGAACATCAGCCATACGGAACCTGCTGTGAGCCTTCACTTGTACAGTCCACCTTTTGATACAT
GCCATGCCTTTGATCAAAGAACAGGACATAAAAACAAAGTACAATGACATTCCATAGTAAATTTGGAAT
CAGAACTCCAATGCAACTTCGGGCTCGCTGGAGAAAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:	>RC206067 protein sequence Red=Cloning site Green=Tags(s)
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MEQTEVLKPRTLADLIRILHQLFAGDEVNVEEVQAIMEAYESDPTEWAMYAKFDQYRYTRNLVDQNGKF
NLMILCWGEGHGSSIHDHTNSHCFLKMLQGNLKETLFAWPKKSNEMVKKSERVLRENQCAVINDSVGLH
RVENISHTEPAVSLHLYSPPFDTCHAFDQRTGHKNKVTMTFHSKFGIRTPNATSGSLENN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



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Chromatograms: https://cdn.origene.com/chromatograms/mk6072_g05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001801

ORF Size: 600 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_001801.3](#)

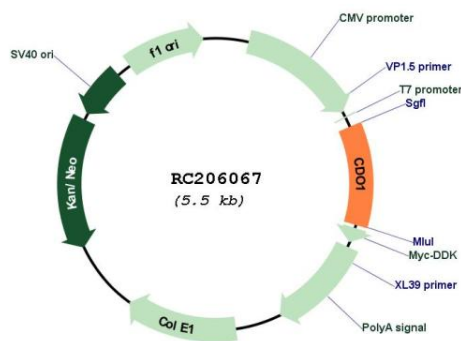
RefSeq Size: 1627 bp

RefSeq ORF: 603 bp

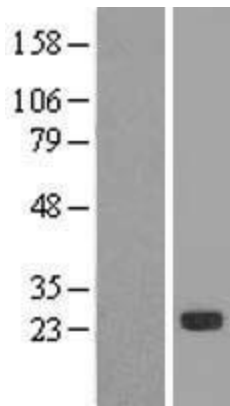
Locus ID: 1036

UniProt ID: [Q16878](#)
Cytogenetics: 5q22.3
Protein Pathways: Cysteine and methionine metabolism, Metabolic pathways, Taurine and hypotaurine metabolism
MW: 23 kDa
Gene Summary: Initiates several important metabolic pathways related to pyruvate and several sulfate compounds including sulfate, hypotaurine and taurine. Critical regulator of cellular cysteine concentrations. Has an important role in maintaining the hepatic concentration of intracellular free cysteine within a proper narrow range.[UniProtKB/Swiss-Prot Function]

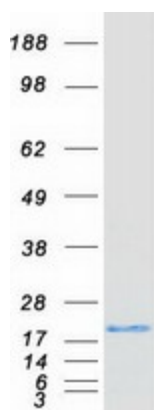
Product images:



Circular map for RC206067



Western blot validation of overexpression lysate (Cat# [LY419737]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206067 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CDO1 protein (Cat# [TP306067]). The protein was produced from HEK293T cells transfected with CDO1 cDNA clone (Cat# RC206067) using MegaTran 2.0 (Cat# [TT210002]).