

Product datasheet for **RC205583**

ADO (NM_032804) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ADO (NM_032804) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ADO
Synonyms:	C10orf22
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC205583 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCCGAGACAACATGGCCTCCTTGATCCAACGGATCGCCCGCCAGGCTTGCTCACCTTCGGGGCA
GCTGGGGCGCCGCGCGCTTCCGATCGCGACGCGGCTTCTGGCGCGAGGCGCCGATGCAGCCGGGCTT
CCCCGAGAACCTGAGCAAGCTGAAGAGCCTCTGACCCAGCTCCGCGCCGAGGACTTGAACATCGCCCCG
CGCAAGGCCACACTGCAGCCGCTGCCGCCAACCTGCCGCCAGTCACCTACATGCACATCTACGAGACGG
ACGGCTTCAGCCTGGGCGTGTCTGCTCAAGAGCGGCACGTCCATCCCCTGCACGACCACCCGGGCAT
GCACGGCATGCTCAAGGTGCTGTACGGCACCGTGCATCAGCTGCATGGACAAGCTAGACGCGGGCGGC
GGCAACGGCCGCGGGCCTTGCCGCCGAGCAGATTCGAGCCCGCTGCAGCCCCGGGAGCGAGAAG
CCGTGCGGCCGGGCGTGTGCTGCGGGCCGAGTACACCGAGGCCAGCGGCCCTGCATCCTCACACC
GCACCGGGACAACCTGCACCAGATCGACGCCGTGGAAGGGCCTGCCGCTTCTGGACATCCTGGCCCCG
CCCTACGACCCGGACGATGGCCGGGACTGCCACTATTACCGGGTGTGGACCGGTCAGGCCCAAGGAGG
CCTCCAGCTCGGCCTGTGACCTGCCTCGAGAGGTGTGGCTCCTGGAGACCCACAGGCCGATGACTTCTG
GTGCGAGGGAGAACCCTATCCAGGTCCCAAGTCTTCCCT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC205583 protein sequence
Red=Cloning site Green=Tags(s)

MPRDNMASLIQRIARQACLTFRGSWGGRGASDRDAASGAEAPMQPGFPENLSKLLKSLTQLRAEDLNIA
 RKATLQPLPPNLPVYMHYETDGFSLGVFLKSGTSLPLHDHPGMHGLKVLVYGTVRI SCMDKLDAGG
 GQRPRALPPEQQFEPPLQPREREAVRPGVLRSAEYTEASGPCILTPHRDNLHQIDAVEGPA AFLDILAP
 PYDPPDDGRDCHYYRVLEPVRPKEASSACDLPREVWLETPQADDFWCEGEPYPGPKVFP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6535_d03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_032804

ORF Size: 810 bp

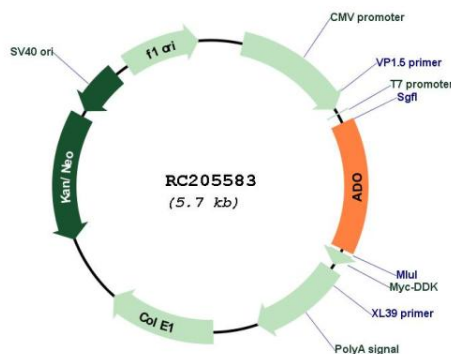
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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](#)

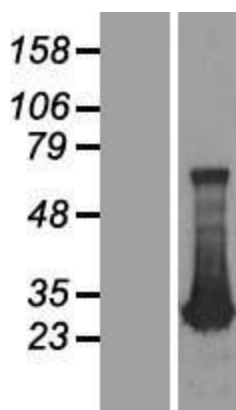
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<ol style="list-style-type: none"> 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:	<u>NM_032804.5</u> , <u>NP_116193.2</u>
RefSeq Size:	3739 bp
RefSeq ORF:	813 bp
Locus ID:	84890
UniProt ID:	<u>Q96SZ5</u>
Cytogenetics:	10q21.3
Protein Pathways:	Metabolic pathways, Taurine and hypotaurine metabolism
MW:	29.9 kDa
Gene Summary:	Human thiol dioxygenases include cysteine dioxygenase (CDO; MIM 603943) and cysteamine (2-aminoethanethiol) dioxygenase (ADO; EC 1.13.11.19). CDO adds 2 oxygen atoms to free cysteine, whereas ADO adds 2 oxygen atoms to free cysteamine to form hypotaurine (Dominy et al., 2007 [PubMed 17581819]).[supplied by OMIM, Mar 2008]

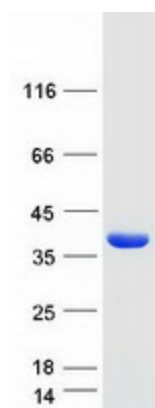
Product images:



Circular map for RC205583



Western blot validation of overexpression lysate (Cat# [LY409931]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205583 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ADO protein (Cat# [TP305583]). The protein was produced from HEK293T cells transfected with ADO cDNA clone (Cat# RC205583) using MegaTran 2.0 (Cat# [TT210002]).