

## Product datasheet for **RC204163**

### **ABP1 (AOC1) (NM\_001091) Human Tagged ORF Clone**

#### **Product data:**

|                           |  |
|---------------------------|--|
| Product Type:             | Expression Plasmids                            |
| Product Name:             | ABP1 (AOC1) (NM_001091) Human Tagged ORF Clone |
| Tag:                      | Myc-DDK  |
| Symbol:                   | ABP1   |
| Synonyms:                 | ABP; ABP1; DAO; DAO1; KAO                      |
| Mammalian Cell Selection: | Neomycin                                       |
| Vector:                   | pCMV6-Entry (PS100001)                         |
| E. coli Selection:        | Kanamycin (25 ug/mL)                           |



[View online »](#)

ORF Nucleotide  
Sequence:

>RC204163 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGCCGGCCCTGGGCTGGGCCGTGGCTGCCATCCTGATGCTGCAGACGGCCATGGCGGAGCCCTCCCCGG  
GGACTCTGCCCAGGAAGGCAGGGGTGTTTTAGACCTAAGCAACCAAGAGCTGAAGGCAGTGCACAGCTT  
CCTCTGGTCCAAGAAGGAGCTGAGGCTGCAGCCCTCCAGTACCACCACCATGGCCAAGAACACCGTGTTT  
CTCATCGAGATGCTGCTGCCAAGAAGTACCATGTGCTGAGGTTTCTGGATAAAGGTGAAAGGCATCCTG  
TGCGGGAAGCCCGTGCCGTATCTTTGGTGACCAGGAGCATCCCAATGTCACCGAGTTTGCTGTGGG  
GCCCTGCCAGGGCCCTGCTACATGCGAGCACTGTCCCCAGGCCTGGTACCAGTCTCCTGGGCATCG  
AGGCCATCTCCACAGCAGAGTATGCCCTCCTTACCACACCCTGCAGGAAGCCACCAAGCCCTGCATC  
AGTTCTTCTCAATACCACAGGCTTCTCATTCCAAGACTGCCATGACAGATGCCTGGCCTTACCAGATG  
GGCCCCCGGGGTGTGGCTTCTGGCCAGCGCCGAGTTGGCTTATCATACAGCGTATGTAGAAGGCTAC  
TTTCTGCACCCCACTGGGCTGGAGCTCCTCGTGGATCATGGGAGCACAGATGCTGGGCACTGGGCGGTGG  
AGCAGGTGTGGTACAACGGGAAGTTCTATGGGAGCCCAGAGGAAGTGGCTCGGAAGTATGCAGATGGAGA  
GGTGGACGTGGTGGTCTGGAGGACCCGCTGCCTGGGGCAAGGGGCATGACAGCACAGAGGAGCCGCC  
CTCTTCTCCTCCACAAGCCCGCGGGGACTTCCCCAGCCCCATCCATGTGAGCGGCCCCCGCTTGGTCC  
AGCCCCACGGCCCTCGTTCAGGCTGGAGGGCAACGCTGTGCTCTACGGCGGCTGGAGCTTTGCCTTCCG  
GCTGCGCTCCTCCTCCGGGCTGCAGGCTCTGAACGTGCACTTCGGCGGAGAGCGCATTGCCTATGAGGTC  
AGCGTGAAGAGGCAGTGGCGCTGTATGGAGGACACACCTGCAGGCATGCAGACCAAGTACCTCGATG  
TCGGCTGGGGCTGGGCAGCGTCACTCATGAGTTAGCCCCGGCATCGACTGCCCGAGACCCGCCACCTT  
CCTGGACACTTTCCACTACTATGATGCCGATGACCCGGTCCATTATCCCCGAGCCCTCTGCCTCTTTGAA  
ATGCCACAGGGGTGCCCTTCGGCGGCACTTTAATTCCAACCTTAAAGGTGGCTTCAACTTCTATGCAG  
GGCTGAAGGGCCAGGTGCTGGTGTGCGGACAACCTCAACTGTCTACAATTATGATTACATTTGGGACTT  
TATCTTACCCCAACGGGGTATGGAGGCCAAGATGCATGCCACTGGCTACGTCCACGCCACCTTCTAC  
ACCCCGAGGGGCTGCGCCACGGCACTCGCTGCACACCACCTGATTGGCAACATACACACTCACTTGG  
TGCACTACCGGTAGACCTGGATGTGGCAGGCACCAAGAAGAGCTTCCAGACACTGCAGATGAAGCTAGA  
AAACATACCAACCCCTGGAGCCCGAGACACCGCGTGGTCCAGCCAACTTGGAGCAGACGCAGTACTCC  
TGGGAGCGCCAGGCGGCTTCCGCTTCAAAGGAAGCTGCCCAAGTACCTGCTTTTACCAGCCCCCAGG  
AGAACCCCTGGGGCCACAAGCGCAGTACCGCCTGCAGATCCACTCCATGGCCGACCAGGTGCTGCCCC  
AGGCTGGCAGGAGGAGCAGGCCATCACCTGGGCAAGGTACCCCTGGCAGTGACCAAGTACCGGGAGTCA  
GAGCTGTGCAGCAGCAGCATCTACCACCAGAACGCCCTGGGACCCGCGTGGTCTTTGAGCAGTTTC  
TTCACAACAACGAGAACATTGAAAATGAGGACCTGGTGGCCTGGGTGACGGTGGGCTTCTGCACATCCC  
CCTCAGAGGACATTCCAACACAGCCACACCTGGGAACCTCCGTGGGCTTCTGCTCCGGCCATTCAAC  
TTCTTCCAGAGGACCCCTCCCTGGCATCCAGAGACACTGTGATCGTGTGGCCTCGGGACAACGGCCCA  
ACTACGTCCAGCGCTGGATCCCTGAGGACAGGGACTGCTCGATGCCTCCCCCTTTAGCTACAATGGGAC  
CTATAGACCTGTG

**ACGCGT**ACGCGGCGGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC204163 protein sequence  
 Red=Cloning site Green=Tags(s)

```
MPALGWAVAAIIMLQTAMAEPSPGTLPRKAGVFSDLNQELKAVHSFLWSKKELRLQPSSTTTMAKNTVF
LIEMLLPKKYHVLRFIDKGERHPVREARAVIFFGDQEHNVTEFAVGPLPGPCYMRALSPRPGYQSSWAS
RPISTA EYALLYHTLQEATKPLHQFFLNTTGF SFQDCHDRCLAF TDVAPRGVASGQRRSWLIIQRVVEGY
FLHPTGLELLVDHGSTDAGHWAVEQVWYNGKFYGSPEELARKYADGEVDVVLEDP LGGKGHDSTEEPP
LFSSHKPRGDFPSPIHVSGPRLVQPHGPRFRLEGNVAVLYGGWSFAFRLRSSGLQVLNVHFGGERIAYEV
SVQEAVALYGGHTPAGMQTKYLDVGVWGLSVTHELAPGIDCPETATFLDTFHYYDADDPVHYPRALCLFE
MPTGVPLRRHFNSNFKGGFNFYAGLKGQVLVLR TTSTVYNYDYIWDFIFYPNGVMEAKMHATGYVHATFY
TPEGLRHGTRLHHLIGNIHTHLVHYRVDLDVAGTKNSFQTLQMKLENITNPWSPRRHVQPTLEQTQYS
WERQA AFRFRKRLPKYLLFTSPQENPWGHKRSYRLQIHSMA DQVLP GGWQEEQAITWARYPLAVTKYRES
ELC SSSIYHQNDPWPDPVVEQFLHNNENIENEDLVAVVTVGFLHIPHSEDIPNTATPGNSVGLLRPFN
FFPEDPSLASRDTVIVWPRDNGPNYVQRWIPEDRDCSMPPPF SYNGTYRPV
```

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6202\\_h08.zip](https://cdn.origene.com/chromatograms/mk6202_h08.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

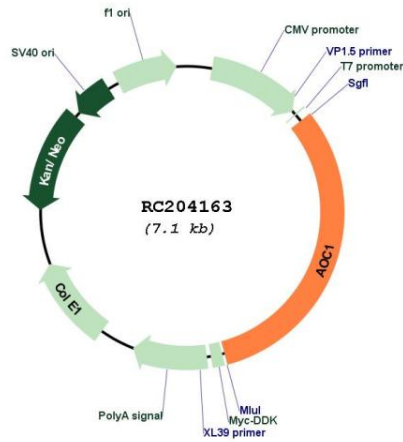
**ACCN:** NM\_001091

**ORF Size:** 2253 bp

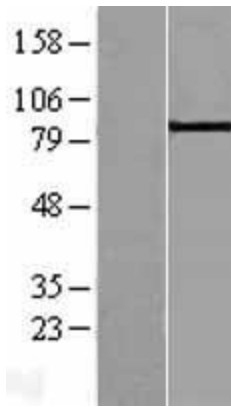
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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.

|                               |   |
|-------------------------------|---|
| <b>Components:</b>            | 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).  |
| <b>Reconstitution Method:</b> | <ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol> |
| <b>RefSeq:</b>                | <a href="#">NM_001091.4</a>   |
| <b>RefSeq Size:</b>           | 2446 bp   |
| <b>RefSeq ORF:</b>            | 2256 bp   |
| <b>Locus ID:</b>              | 26  |
| <b>UniProt ID:</b>            | <a href="#">P19801</a>  |
| <b>Cytogenetics:</b>          | 7q36.1  |
| <b>Domains:</b>               | Cu_amine_oxid   |
| <b>Protein Families:</b>      | Secreted Protein  |
| <b>Protein Pathways:</b>      | Arginine and proline metabolism, Histidine metabolism, Tryptophan metabolism  |
| <b>MW:</b>                    | 85.3 kDa  |
| <b>Gene Summary:</b>          | This gene encodes a metal-binding membrane glycoprotein that oxidatively deaminates putrescine, histamine, and related compounds. The encoded protein is inhibited by amiloride, a diuretic that acts by closing epithelial sodium ion channels. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Jan 2013]  |

**Product images:**


Circular map for RC204163



Western blot validation of overexpression lysate (Cat# [LY400441]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204163 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified AOC1 protein (Cat# [TP304163]). The protein was produced from HEK293T cells transfected with AOC1 cDNA clone (Cat# RC204163) using MegaTran 2.0 (Cat# [TT210002]).