

Product datasheet for **RC216834**

HAO1 (NM_017545) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HAO1 (NM_017545) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HAO1
Synonyms:	GOX; GOX1; HAOX1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC216834 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGCTCCCCGGCTAATTTGTATCAATGATTATGAACAACATGCTAAATCAGTACTTCCAAAGTCTATAT
ATGACTATTACAGGTCTGGGCAAATGATGAAGAACTTTGGCTGATAATATTGCAGCATTTCCAGATG
GAAGCTGTATCCAAGGATGCTCCGGAATGTTGCTGAAACAGATCTGTCGACTTCTGTTTTAGGACAGAGG
GTCAGCATGCCAATATGTGTGGGGCTACGGCCATGCAGCGCATGGCTCATGTGGACGGCGAGCTTGCCA
CTGTGAGAGCCTGTCAAGTCCCTGGGAACGGGCATGATGTTGAGTTCCTGGGCCACCTCCTCAATTGAAGA
AGTGGCGGAAGCTGGTCTGAGGCACTTCGTTGGCTGCAACTGTATATCTACAAGGACCGAGAAGTCACC
AAGAAGCTAGTGCGGCAGGCAGAGAAGATGGGCTACAAGGCCATATTTGTGACAGTGGACACACCTTACC
TGGCAACCGTCTGGATGATGTGCGTAACAGATTCAACTGCCGCCCAACTCAGGATGAAAAATTTTGA
AACCAGTACTTTATCATTTTCTCCTGAGGAAAAATTTGGAGACGACAGTGGACTTGCTGCATATGTGGCT
AAAGCAATAGACCCATCTATCAGCTGGGAAGATATCAAATGGCTGAGAAGACTGACATCATTGCCAATTG
TTGCCAAAGGGCATTTTGAGAGGTGATGATGCCAGGGAGGCTGTTAAACATGGCTTGAATGGGATCTTGGT
GTCGAATCATGGGGCTCGACAACCTCGATGGGGTGCCAGCCACTATTGATGTTCTGCCAGAAATTGTGGAG
GCTGTGGAAGGGAAGGTGGAAGTCTTCTGACGGGGGTGTGCGGAAAGGCACTGATGTTCTGAAAGCTC
TGGCTCTTGGCGCAAGGCTGTGTTGTGGGGAGACCAATCGTTTGGGGCTTAGCTTTCCAGGGGGAGAA
AGGTGTTCAAGATGTCTCGAGATACTAAAGGAAGAATCCGGTTGGCCATGGCTCTGAGTGGTGCCAG
AATGTGAAAGTCATCGACAAGACATTGGTGAGGAAAAATCCTTTGGCCGTTTCCAAGATC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC216834 protein sequence
Red=Cloning site Green=Tags(s)

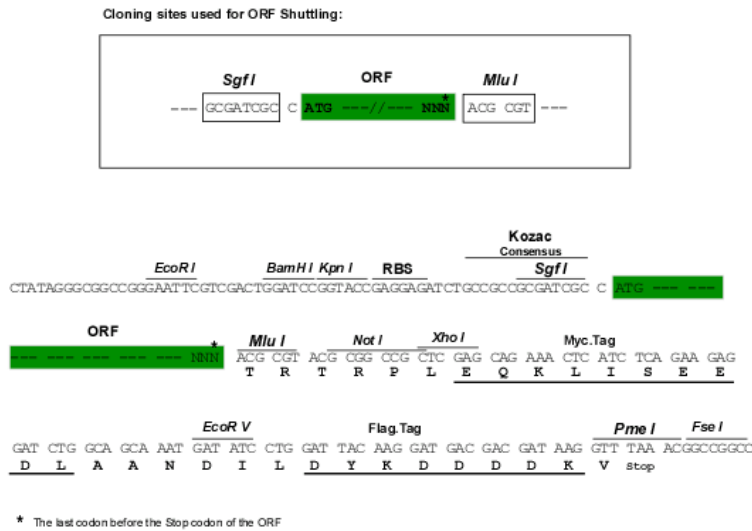
MLPRLICINDYEQHAKSVLPKSIYDYRSGANDEETLADNIAAFSRWKL YPRMLRNV AETDLSTSVLGQR
 VSMPICVGATAMQRM AHVDGELATVRACQSLGTGMMLSSWATSSIEEVAEAGPEALRWLQLYIKDREVT
 KKLVRQA EKMGYK AIFVTVDTPYLG NRLLDDVRNRFKLPPQLRMKNFETSTLSFSPEENFGD DSGLAAYVA
 KAIDPSISWEDIKWLRRLLTSLPIVAKGILRGDDAREAVKHGLNGILVSNHGARQLDGV PATIDVLP EIVE
 AVEGKVEVFLDGGV RKGTDVLKALALGAKAVFVGRPIVWGLAFQGEKGVQDVLEILKEEFRLAMALSGCQ
 NVKVIDKTLVRKNPLAVSKI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

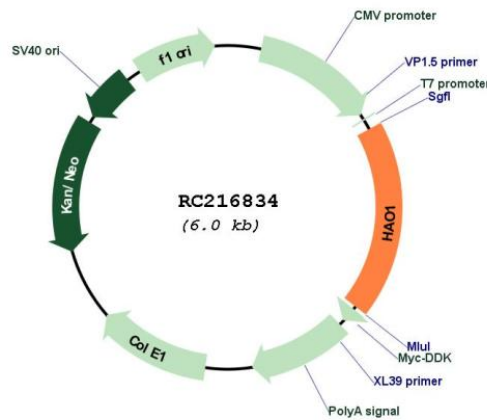
Chromatograms: https://cdn.origene.com/chromatograms/mk6462_a11.zip

Restriction Sites: SgfI-MluI

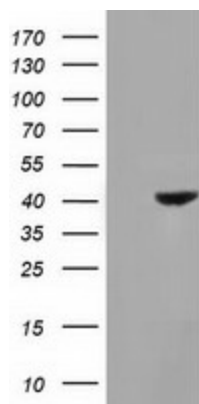
Cloning Scheme:



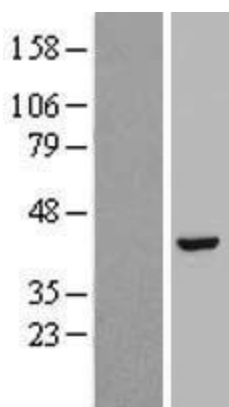
Plasmid Map:



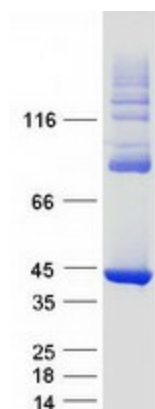
ACCN:	NM_017545
ORF Size:	1110 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own 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:	<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:	NM_017545.3
RefSeq Size:	1746 bp
RefSeq ORF:	1113 bp
Locus ID:	54363
UniProt ID:	Q9UJM8
Cytogenetics:	20p12.3
Domains:	FMN_dh
Protein Pathways:	Glyoxylate and dicarboxylate metabolism, Metabolic pathways
MW:	40.9 kDa
Gene Summary:	This gene is one of three related genes that have 2-hydroxyacid oxidase activity yet differ in encoded protein amino acid sequence, tissue expression and substrate preference. Subcellular location of the encoded protein is the peroxisome. Specifically, this gene is expressed primarily in liver and pancreas and the encoded protein is most active on glycolate, a two-carbon substrate. The protein is also active on 2-hydroxy fatty acids. The transcript detected at high levels in pancreas may represent an alternatively spliced form or the use of a multiple near-consensus upstream polyadenylation site. [provided by RefSeq, Jul 2008]

Product images:


HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY HAO1 (Cat# RC216834, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-HAO1 (Cat# [TA501959]). Positive lysates [LY413692] (100ug) and [LC413692] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY413692]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216834 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified HAO1 protein (Cat# [TP316834]). The protein was produced from HEK293T cells transfected with HAO1 cDNA clone (Cat# RC216834) using MegaTran 2.0 (Cat# [TT210002]).