

Product datasheet for **RG205051**

HAO2 (NM_016527) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HAO2 (NM_016527) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	HAO2
Synonyms:	GIG16; HAOX2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG205051 representing NM_016527 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCCTTGGTGTGTCTGACAGACTTTCAGGCCATGCGCGAGAGCAGCTGTCTAAGTCAACTCGGGATT
TTATTGAAGGTGGAGCAGATGACAGCATCACGCGGGATGACAACATTGCAGCATTTAAAAGAATTCGCCT
CCGTCCCGGTACCTGAGAGATGTGTCTGAGGTGGACACCAGAACCACAATCCAAGGGGAGGAGATCAGT
GCCCTATTTGTATCGCACCCACAGGGTCCACTGCCTTGTCTGGCCTGATGGGAAATGAGCACAGCAA
GAGCTGCCAAGCGGCTGGTATCTGCTACATCACCAGCACATTTGCCAGCTGTAGCCTTGAAGACATTGT
CATTGCAGCTCCCGAAGGCTCCGATGGTTCCAACCTATGTGCATCCAGACCTGCAGCTGAACAAACAG
TTGATCCAGAGGGTAGAATCCCTAGGTTTCAAAGCTTTGGTAATAACTTTGGATACACCTGTATGTGGCA
ACAGGCGCATGACATTCGAAACCAGTTGAGGAGGAACCTAACACTAACAGATCTTCAATCACCTAAAAA
GGGAAATGCAATACCTTATTTCCAGATGACTCCTATCAGCACTTCTCTGCTGGAATGATCTCTCTGG
TTTCAGAGCATAACTCGATTGCCATCATCCTGAAAGGGATTTGACAAAAGAGGATGCAGAGTTAGCTG
TGAAGCACAATGTCCAGGGTATCATTGTTTCAACCATGGTGGGAGGCAGCTTGATGAGGTTCTTGCTTC
AATTGATGCTTTGACAGAAGTGGTGGCTGCTGTAAGGGGAAAATTGAAGTCTACCTGGATGGCGGGGTC
CGAACTGGCAATGATGTCTGAAGGCTCTGGCCCTTGGAGCTAAGTGCATTTTTCTGGGAGACCAATCC
TATGGGGCCTTGCTGCAAGGGTGAACATGGTGTAAAGGAATTTGAACATTTAACAATGAGTTCCA
CACTTCCATGGCCCTTACAGGCTGCCGGTCGGTCGCTGAGATCAATCGAACTTGGTCCAGTTTTCCAGG
CTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG205051 representing NM_016527
 Red=Cloning site Green=Tags(s)

MSLVCLTDFQAHAREQLSKSTRDFIEGGADDSITRDDNIAAFKRIRLRPRYL RDVSEVDTRTTIQGEEIS
 APICIAPTGFHCLVWPDGEMSTARAAQAAGICYITSTFASCLEDIVIAAPEGLRWFQLYVHPDLQLNKQ
 LIQRVESLGFKALVITLDTVPVCGNRRHDIRNQLRRNLTLDLQSPKKGNAIPYFQMTPISTSLCWNDSLW
 FQSITRLPIILKGILTKEDAELAVKHNVQGIIVSNHGGRQLDEVLASIDALTEVVAAVKGGIEVYLDGGV
 RTGNDVLKALALGAKCIFLGRPILWGLACKGEHGVKEVLNILTNEFHSMALTGCRSVAEINRNLVQFSR
 L

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_016527

ORF Size: 1053 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_016527.2](#), [NP_057611.1](#)

RefSeq Size: 1476 bp

RefSeq ORF: 1056 bp

Locus ID: 51179

UniProt ID: [Q9NYQ3](#)

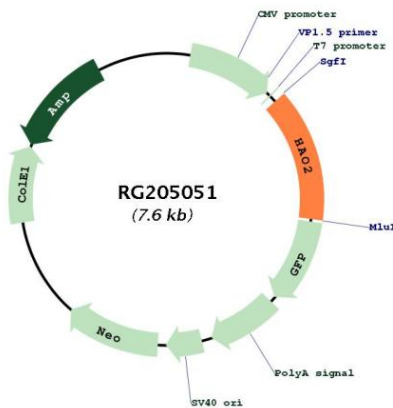
Cytogenetics: 1p12

Domains: FMN_dh

Protein Pathways: Glyoxylate and dicarboxylate metabolism, Metabolic pathways

Gene Summary: This gene is one of three related genes that have 2-hydroxyacid oxidase activity. The encoded protein localizes to the peroxisome has the highest activity toward the substrate 2-hydroxypalmitate. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2014]

Product images:



Circular map for RG205051