

## Product datasheet for **RG218416**

### HAO2 (NM\_001005783) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** HAO2 (NM\_001005783) 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:** >RG218416 representing NM\_001005783  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGTCCTTGGTGTGTTTGACAGACTTTTCAGGCCATGCGCGAGAGCAGCTGTCTAAGTCAACTCGGGATT  
 TTATTGAAGGTGGAGCAGATGACAGCATCACGCGGGATGACAACATTGCAGCATTTAAAAGAATTCGCCT  
 CCGTCCGCGGTACCTGAGAGATGTGTCTGAGGTGGACACCAGAACCACAATCCAAGGGGAGGAGATCAGT  
 GCCCTATTTGTATCGCACCCACAGGGTCCACTGCCTTGTCTGGCCTGATGGGAAATGAGCACAGCAA  
 GAGCTGCCAAGCGGCTGGTATCTGCTACATCACCAGCACATTTGCCAGCTGTAGCCTTGAAGACATTGT  
 CATTGCAGCTCCCGAAGGCTCCGATGGTTCCAACCTATGTGCATCCAGACCTGCAGCTGAACAAACAG  
 TTGATCCAGAGGGTAGAATCCCTAGGTTTCAAAGCTTTGGTAATAACTTTGGATACACCTGTATGTGGCA  
 ACAGGCGACATGACATTCGAAACCAGTTGAGGAGGAACCTAACACTAACAGATCTTCAATCACCTAAAAA  
 GGGAAATGCAATACCTTATTTCCAGATGACTCCTATCAGCACTTCTCTGCTGGAATGATCTCTCCTGG  
 TTTCAGAGCATAACTCGATTGCCCATCATCCTGAAAGGGATTTTGACAAAAGAGGATGCAGAGTTAGCTG  
 TGAAGCACAATGCCAGGGTATCATTGTTTCAACCATGGTGGGAGGCAGCTTGATGAGGTTCTTGCTTC  
 AATTGATGCTTTGACAGAAGTGGTGGCTGCTGTAAGGGGAAAAATTGAAGTCTACCTGGATGGCGGGGTC  
 CGAACTGGCAATGATGTCTGAAGGCTCTGGCCCTTGGAGCTAAGTGCAATTTTTCTGGGAGACCAATCC  
 TATGGGGCCTTGCTGCAAGGGTGAACATGGTGTTAAGGAAGTTTTGAACATTTAACAATGAGTTCCA  
 CACTTCCATGGCCCTTACAGGCTGCCGGTCGGTCGCTGAGATCAATCGAACTTGGTCCAGTTTTCCAGG  
 CTG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG218416 representing NM\_001005783  
Red=Cloning site Green=Tags(s)

MSLVCLTDFQAHAREQLSKSTRDFIEGGADDSITRDDNIAAFKRIRLRPRYL RDVSEVDTRTTIQGEEIS  
 APICIAPTGFHCLVWPDGEMSTARAAQAAGICYITSTFASCLEDIVIAAPEGLRWFQLYVHPDLQLNKQ  
 LIQRVESLGFKALVITLDTVPVCGNRRHDIRNQLRRNLTLDLQSPKKGNAIPYFQMTPISTSLCWNDSLW  
 FQSITRLPIILKGILTKEDAELAVKHNVQGIIVSNHGGRLDEVLASIDALTEVVAAVKGIIEVYLDGGV  
 RTGNDVLKALALGAKCIFLGRPILWGLACKGEHGVKEVLNILTNEFHSMALTGCRSVAEINRNLVQFSR  
 L

TRTRPLE - GFP Tag - V

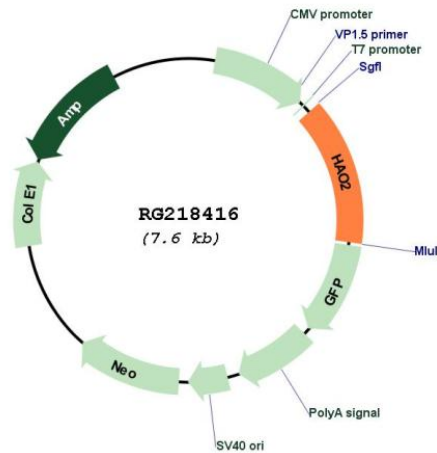
**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:**

NM\_001005783

<b>ORF Size:</b>	1053 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	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_001005783.1</a> , <a href="#">NP_001005783.1</a>
<b>RefSeq Size:</b>	1696 bp
<b>RefSeq ORF:</b>	1095 bp
<b>Locus ID:</b>	51179
<b>UniProt ID:</b>	<a href="#">Q9NYQ3</a>
<b>Cytogenetics:</b>	1p12
<b>Protein Pathways:</b>	Glyoxylate and dicarboxylate metabolism, Metabolic pathways
<b>Gene Summary:</b>	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]