

Product datasheet for SC310572

HAAO (NM_012205) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HAAO (NM_012205) Human Untagged Clone
Tag:	Tag Free
Symbol:	HAAO
Synonyms:	3-HAO; h3HAO; HAO; VCRL1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC310572 representing NM_012205. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGAGCGCCGCTGGGAGTGAGGGCCTGGGTGAAGGAGAACCGGGGCTCCTCCAGCCCCGGTCTGC
AACAGCTCATGCACCAGGAGCAGCTCAAAGTCATGTTTCATCGGAGGCCCAACACCAGGAAGGACTAT
CACATCGAAGAGGGTGAAGAGGTATTTACCAGCTGGAGGGAGACATGGTTCTCCGAGTCTGGAGCAA
GGGAAACACCGGGATGTGGTCATTCGGCAGGGAGAGATATTCCTCCTGCCTGCCAGGGTGCCCCACTCA
CCACAGAGGTTTGCCAACACCGTGGGGCTGGTGGTTGAGCGAAGGCGGCTGGAGACCAGCTAGATGGG
CTCAGGTAATGTGGGCGACACCATGGACGTTCTGTTTGAGAAGTGGTCTACTGCAAGGACCTCGGC
ACGCAGTTGGCCCCATCATCCAGGAGTTCTTCAGCTCTGAGCAGTACAGAACAGGAAAGCCCATCCCT
GACCAGCTGCTCAAGGAGCCACCATTCCCTCTGAGCACACGATCCATCATGGAGCCCATGTCCCTGGAT
GCCTGGCTGGACAGCCACCACAGGGAGCTGCAGGCAGGCACACCACTCAGCCTGTTTGGGGACACCTAT
GAGACCCAGGTGATCGCCTATGGGCAAGGCAGCAGCGAAGGCCTGAGACAGAATGTGGACGTGTGGCTG
TGGCAGCTGGAGGGCTCCTCGGTGGTGACAATGGGGGACGGCGCCTGAGCCTGGCCCCTGATGACAGC
CTCCTGGTGCTAGCTGGGACCTCGATGCCTGGGAGCGAACACAAGGCTCTGTGGCCCTGTCTGTGACC
CAGGACCCTGCCTGCAAGAAGCCCTGGGGTGA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGCGC
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Restriction Sites:	Sgfl-MluI
ACCN:	NM_012205
Insert Size:	861 bp



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OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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_012205.2
RefSeq Size:	1301 bp
RefSeq ORF:	861 bp
Locus ID:	23498
UniProt ID:	P46952
Cytogenetics:	2p21
Protein Pathways:	Metabolic pathways, Tryptophan metabolism
MW:	32.6 kDa
Gene Summary:	3-Hydroxyanthranilate 3,4-dioxygenase is a monomeric cytosolic protein belonging to the family of intramolecular dioxygenases containing nonheme ferrous iron. It is widely distributed in peripheral organs, such as liver and kidney, and is also present in low amounts in the central nervous system. HAAO catalyzes the synthesis of quinolinic acid (QUIN) from 3-hydroxyanthranilic acid. QUIN is an excitotoxin whose toxicity is mediated by its ability to activate glutamate N-methyl-D-aspartate receptors. Increased cerebral levels of QUIN may participate in the pathogenesis of neurologic and inflammatory disorders. HAAO has been suggested to play a role in disorders associated with altered tissue levels of QUIN. [provided by RefSeq, Jul 2008]