

Recombinant Human 3-hydroxyanthranilate 3,4-dioxygenase, His-tagged

Cat. No. HAAO-2403H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant humanHAAO protein, fused to His-tag at N-terminus, was expressed in E.coli andpurified by using conventional chromatography techniques
Species	Human
Source	E.coli
Description	HAAO is a monomericcytosolic protein belonging to the family of intramolecular dioxygenasescontaining nonheme ferrous iron. This protein catalyzes the synthesis ofquinolinic acid (QUIN) from 3-hydroxyanthranilic acid. QUIN is an excitotoxinwhose toxicity is mediated by its ability to activate glutamateN-methyl-D-aspartate receptors. Increased cerebral levels of QUIN mayparticipate in the pathogenesis of neurologic and inflammatory disorders.HAAO has been suggested to play a role in disorders associated with alteredtissue levels of QUIN
Form	Liquid. In 20mMTris-HCl buffer (pH 8.0) containing 0.15M NaCl, 10% glycerol, 1mM DTT
Molecular Weight	35kDa (310aa),confirmed by MALDI-TOF
Purity	> 90% by SDS -PAGE
Concentration	0.5mg/ml (determinedby BCA assay)

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 45-1 Ramsey Road, Shirley, NY 11967, USA

Sequences of aminoacids

MGSSHHHHHHSSGLVPRGSH MGSHMERRLG VRAWVKENRG SFQPPVCNKL
 MHQEQLKVMF IGGPNTRKDY HIEEGEEVFYQLEGDMVLRV LEQGKHRDVV
 IRQGEIFLLP ARVPHSPQRF ANTVGLVVER RRLETELDGL
 RYYVGD TMDVLF EKWFYCKD LGTQLAPIIQ EFFSSEQYRT GKPIPDQLLK
 EPPFPLSTRS IMEPMSLDAW LDSHHRELQAGTPLSLFGDT YETQVIAYGQ
 GSSEGLRQNV DVWLWQLEGS SVVTMGGRRL SLAPDDSLLV
 LAGTSYAWERTQGSVALSVT QDPAKCKPLG

Storage

Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

GENE INFORMATION
Gene Name

HAAO3-hydroxyanthranilate 3,4-dioxygenase [Homo sapiens]

Official Symbol

HAAO

Synonyms

HAAO; 3-hydroxyanthranilate 3,4-dioxygenase; 3 HAO; 3 hydroxyanthranilate 3 4 dioxygenase; 3hydroxyanthranilate dioxygenase; 3 hydroxyanthranilate oxygenase; 3hydroxyanthranilic acid dioxygenase; 3-HAO; 3-hydroxyanthranilate 3;3-hydroxyanthranilate oxygenase; 3-hydroxyanthranilic acid dioxygenase; 3HAO_HUMAN; 4-dioxygenase; haao; HAD; HAO; HAD; 3-hydroxyanthranilate oxygenase; 3-hydroxyanthranilic acid dioxygenase; HAO; 3-HAO

Gene ID

23498

mRNA Refseq

NM_012205

Protein Refseq

NP_036337

MIM

604521

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Uniprot ID	P46952
Chromosome Location	2p
Pathway	Metabolic pathways,organism-specific biosystem; Metabolism, organism-specific biosystem;Metabolism of amino acids and derivatives, organism-specific biosystem; NADbiosynthesis II (from tryptophan), conserved biosystem; Tryptophancatabolism, organism-specific biosystem
Function	3-hydroxyanthranilate3,4-dioxygenase activity; 3-hydroxyanthranilate 3,4-dioxygenase activity;electron carrier activity; ferrous iron binding; metal ion binding

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