Recombinant human HAAO protein

Catalog Number: ATGP1559

PRODUCT INFORMATION

Expression system
E.coli

Domain
1-286aa

UniProt No.
P46952

NCBI Accession No.
NP_036337

Alternative Names
3-hydroxyanthranilate 34-dioxygenase, 3-hydroxyanthranilate 3,4-dioxygenase, 3-HAO, HAO

PRODUCT SPECIFICATION

Molecular Weight
35 kDa (310aa) confirmed by MALDI-TOF

Concentration
0.5mg/ml (determined by BCA assay)

Formulation
Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.15M NaCl, 10% glycerol, 1mM DTT

Purity
> 90% by SDS-PAGE

Tag
His-Tag

Application
SDS-PAGE

Storage Condition
Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description
HAAO is a monomeric cytosolic protein belonging to the family of intramolecular dioxygenases containing nonheme ferrous iron. This protein 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. Recombinant human HAAO protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using

conventional chromatography techniques.

Amino acid Sequence

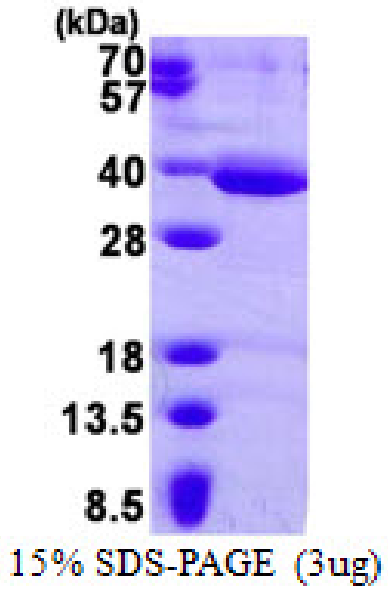
MGSSHHHHHH SSGLVPRGSH MGSHMERRLG VRAWVKENRG SFQPPVCNKL MHQEQLKVMF IGGPNTRKDY HIEEGEEVFY QLEGDMVLRV LEQGKHRDVV IRQGEIFLLP ARVPHSPQRF ANTVGLVVER RRLETELDGL RYYVGDTMDV LFEKWFYCKD LGTQLAPIIQ EFFSSEQYRT GKPIPDQLLK EPPFPLSTRS IMEPMSLDAW LDSHHRELQA GTPLSLFGDT YETQVIAYGQ GSSEGLRQNV DVWLWQLEGS SVVTMGGRRL SLAPDDSLLV LAGTSYAWER TQGSVALSVT QDPACKKPLG

General References

Malherbe P., et al. (1994) J Biol Chem. 13 269(19):13792-7.

DATA

SDS-PAGE



15% SDS-PAGE (3ug)

3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.