

Recombinant human TDO2 protein

Catalog Number: ATGP0939

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-406aa

UniProt No.

P48775

NCBI Accession No.

NP_005642

Alternative Names

Tryptophan 23-dioxygenase, Tryptophan 2,3-dioxygenase, TDO, TPH2, TRPO

PRODUCT SPECIFICATION

Molecular Weight

50 kDa (426aa) confirmed by MALDI-TOF

Concentration

0.25mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.2M NaCl, 5mM DTT, 1mM EDTA, 30% glycerol

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

TDO2, also known as TDO, is a ferrous heme enzyme that catalyzes the first and rate-limiting step in the kynurenine pathway, the major pathway of tryptophan metabolism. It incorporates oxygen into the indole moiety of tryptophan. It has a broad specificity towards tryptamine and derivatives including D- and L-tryptophan, 5-hydroxytryptophan and serotonin. Recombinant human TDO2 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

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Amino acid Sequence

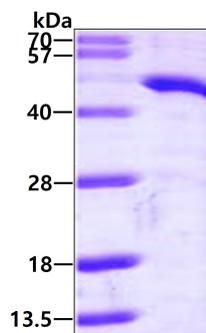
<MGSSHHHHH SSGLVPRGSH> MSGCPFLGNN FGYTFKKLPV EGSEEDKSQT GVNRASKGGL IYGNYLHLEK
VLNAQELQSE TKGNIHDEH LFIITHQAYE LWFKQILWEL DSVREIFQNG HVRDERNMLK VVSRMHRVSV ILKLLVQQFS
ILETMTALDF NDFREYLSPA SGFQSLQFRL LENKIGVLQN MRVPYNRRHY RDNFKGEENE LLLKSEQEKT LLELVEAWLE
RTPGLEPHGF NFWGKLEKNI TRGLEEEFIR IQAKEESEK EEQVAEFQKQ KEVLLSLFDE KRHEHLLSKG ERRLSYRALQ
GALMIYFYRE EPRFQVPFQL LTSMDIDSL MTKWRYNHVC MVHRMLGSKA GTGGSSGYHY LRSTVSDRYK VFVDLFLNLST
YLIPRHWIPK MNPTIHKFLY TAEYCDSSYF SSDESD

General References

Murray MF., et al. (2007) *Curr Drug Metab.* 8(3):197-200.

DATA

SDS-PAGE



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