

TDO2, 1-406aa, Human, His tag, E.coli

Cat.NO.: TP04175

3th Edition

Synonyms:Tryptophan 2,3-dioxygenase, TDO, TPH2, TRPO

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.

Form:Liquid. In 20 mM Tris-HCl buffer (pH8.0) containing 0.2M NaCl, 5mM DTT, 1mM EDTA, 30% glycerol

Molecular Weight:50.0 kDa (426aa), confirmed by MALDI-TOF

Sequences:

MGSSHHHHHSSGLVPRGSHMSGCPFLGNNFGYTFKKLPVEGSEEDKSQTGVNRASKGGLIYGNYLHLEKVLNA
QELQSETKGNKIHDEHLFIITHQAYELWFKQILWELDSVREIFQNGHVRDERNMLKVSRMHRVSVILKLLVQQFSIL
ETMTALDFNDFREYLSPASGFQSLQFRLLLENKIGVLQNMVRPYNRRHYRDNFKGEEENELLLKSEQEKTLLLELVEAW
LERTPGLEPHGFNFWGKLEKNITRGLEEEFIRIQAKEESEKKEEQVAEFQKQKEVLLSLFDEKRHEHLLSKGERRLS
YRALQGALMIYFYREEPRFQVPFQLLTSLMDIDSLMTKWRYNHVCMVHRMLGSKAGTGGSSGYHYLRSTVSDRYK
VFVDLFLNLSYLIPIRHWPKMNPTIHKFLYTAEYCDSSYFSSDES

Purity:> 95% by HPLC

Concentration:0.25 mg/ml (determined by Bradford assay)

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

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.