PRODUCT INFORMATION

Expression system E.coli

Domain 1-118aa

UniProt No. P30046

NCBI Accession No. NP_001346

Alternative Names

D-dopachrome tautomerase, DDCT, D-dopachtome decarboxylase, D-dopachrome tautomerase, D dopachrome decarboxylase, D dopachrome tautomerase, Phenylpyruvate tautomerase II,

PRODUCT SPECIFICATION

Molecular Weight

14.8 kDa (138aa) confirmed by MALDI-TOF

Concentration 1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol

Purity > 95% by SDS-PAGE

Endotoxin level < 1 EU per 1ug of protein (determined by LAL method)

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

DDT is an enzyme that catayzes the tautomerization of D-dopachrome to give 5, 6-dihydroxyindole (DHI). This protein belongs to the family of lyases, specifically the carboxy-lyases, which cleave carbon-carbon bonds. It shares a homologous amino acid sequence (33% identical) with the macrophage migration inhibitory factor (MIF)



and possesses similar tautomerase activity. In addition, it may functions a proinflammatory cytokine. Recombinant human DDT, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography.

Amino acid Sequence

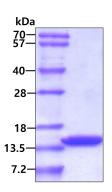
<MGSSHHHHHH SSGLVPRGSH> MPFLELDTNL PANRVPAGLE KRLCAAAASI LGKPADRVNV TVRPGLAMAL SGSTEPCAQL SISSIGVVGT AEDNRSHSAH FFEFLTKELA LGQDRILIRF FPLESWQIGK IGTVMTFL

General References

Arisawa K., et al. (2009) Toxicology. 255(1-2):6-14. Nishihira J., et al. (1999) Biochemistry. 38(11):3268-79.

DATA

SDS-PAGE



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

