

Recombinant human IYD protein

Catalog Number: ATGP2592

PRODUCT INFORMATION

Expression system

E.coli

Domain

24-214aa

UniProt No.

Q6PHW0

NCBI Accession No.

NP_001158167

Alternative Names

iodotyrosine dehalogenase 1 isoform 3, C6orf71, DEHAL1, dj422F24.1, TDH4

PRODUCT SPECIFICATION

Molecular Weight

25.1 kDa (214aa)

Concentration

1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.4M urea, 10% 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

IYD is an enzyme that catalyzes the oxidative NADPH-dependent deiodination of mono- and diiodotyrosine, which are the halogenated byproducts of thyroid hormone production. The N-terminus of the protein functions as a membrane anchor. Mutations in this gene cause congenital hypothyroidism due to dysthyronogenesis type 4, which is also referred to as deiodinase deficiency, or iodotyrosine dehalogenase deficiency, or thyroid hormonogenesis type 4. Alternative splicing results in multiple transcript variants. Recombinant human IYD protein, fused to His-tag at N-terminus, was expressed in E. coli.

Recombinant human IYD protein

Catalog Number: ATGP2592

Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH MGS>DRSMEKK KGEPRTRAEA RPWVDEDLKD SSDLHQAEED ADEWQESEEN
VEHIPFSHNH YPEKEMVKRS QEFYELLNKR RSVRFISNEQ VPMEVIDNVI RTAGTAPSGA HTEPWTFVVV KDPDVKHKIR
KIIEEEEEIN YMKRMGHRWV TDLKCLRNTW IKEYLDTAPI LILIFKQVHG FAANGKKKVH YYNE

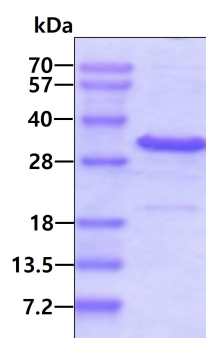
General References

Burniat,A, et al. (2012) J. Clin. Endocrinol. Metab. 97 (7), E1276-E1283

Belevich,V.K., et al. (2011) Biomed Khim 57 (2), 187-194

DATA

SDS-PAGE



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