

## Instruction manual FOR RESEARCH USE ONLY NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

IYD, 24-214aa Human, His tag, E.coli

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3th Edition

Synonyms:iodotyrosine dehalogenase 1 isoform 3, C6orf71, DEHAL1, dJ422F24.1, TDH4

**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 dyshormonogenesis 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.

Form:Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 0.4M UREA, 10% glycerol

Molecular Weight:25.1kDa (214aa)

## Sequences:

MGSSHHHHHHSSGLVPRGSHMGSDRSMEKKKGEPRTRAEARPWVDEDLKDSSDLHQAEEDADEWQESEENVE HIPFSHNHYPEKEMVKRSQEFYELLNKRRSVRFISNEQVPMEVIDNVIRTAGTAPSGAHTEPWTFVVVKDPDVKHKI RKIIEEEEEINYMKRMGHRWVTDLKKLRTNWIKEYLDTAPILILIFKQVHGFAANGKKKVHYYNE

Purity:> 95% by HPLC

Concentration: 1 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.

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