Recombinant Human iodotyrosine deiodinase, His-tagged

Cat. No. IYD-495H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	IYD, 24-214aa Human, His tag, E.coli
Species	Human
Source	E.coli
ProteinLength	24-214 a.a.
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 Mass	25.1kDa (214aa)
AA Sequence	MGSSHHHHHH SSGLVPRGSH MGSDRSMEKK KGEPRTRAEA RPWVDEDLKD SSDLHQAEED ADEWQESEEN VEHIPFSHNH YPEKEMVKRS QEFYELLNKR RSVRFISNEQ VPMEVIDNVI RTAGTAPSGA HTEPWTFVVV KDPDVKHKIR KIIEEEEEIN YMKRMGHRWV TDLKKLRTNW IKEYLDTAPI LILIFKQVHG

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	FAANGKKKVH YYNE
Purity	>90% by SDS - PAGE
Storage	Can be stored at +4C short term (1-2 weeks). For long term storage, aliquot and store at -20C or -70C. Avoid repeated freezing and thawing cycles.
Concentration	1 mg/ml (determined by Bradford assay)

GENE INFORMATION

Gene Name	IYD?iodotyrosine deiodinase [?Homo sapiens?(human)]
Official Symbol	IYD
Synonyms	IYD; TDH4; DEHAL1; C6orf71; dJ422F24.1; iodotyrosine deiodinase; iodotyrosine dehalogenase 1; IYD-1; NP_001158166.1; EC 1.22.1.1; NP_001158167.1; NP_981932.1
Gene ID	389434
mRNA Refseq	NM_001164694
Protein Refseq	NP_001158166
MIM	612025
UniProt ID	Q6PHW0
Chromosome Location	6q25.1

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Pathway	Amine-derived hormones; Metabolism of amino acids and derivatives; Thyroid hormone synthesis
Function	iodide peroxidase activity; oxidoreductase activity

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