

# Recombinant Human iodotyrosine deiodinase, His-tagged

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

## SPECIFICATION

<b>Product Overview</b>	IYD, 24-214aa Human, His tag, E.coli
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>ProteinLength</b>	24-214 a.a.
<b>Description</b>	<p>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.</p>
<b>Form</b>	Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 0.4M UREA, 10% glycerol
<b>Molecular Mass</b>	25.1kDa (214aa)
<b>AA Sequence</b>	<p>MGSSHHHHHH SSSLVPRGSH MGSDRSMEKK KGEPRTRAEA RPWVEDLKD  SSDLHQAEED ADEWQESEEN VEHIPFSHNH YPEKEMVKRS QEFYELLNKR  RSVRFISNEQ VPMEVIDNVI RTAGTAPSGA HTEPWTFVVV KDPDVKHKIR  KIIEEEEEIN YMKRMGHRWV TDLKKLRTNW IKEYLDTAPI LILIFKQVHG</p>

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

	FAANGKKKVH YYNE
<b>Purity</b>	>90% by SDS - PAGE
<b>Storage</b>	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.
<b>Concentration</b>	1 mg/ml (determined by Bradford assay)
<b>GENE INFORMATION</b>	
<b>Gene Name</b>	IYD?iodotyrosine deiodinase [?Homo sapiens?(human) ]
<b>Official Symbol</b>	IYD
<b>Synonyms</b>	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
<b>Gene ID</b>	<a href="#">389434</a>
<b>mRNA Refseq</b>	<a href="#">NM_001164694</a>
<b>Protein Refseq</b>	<a href="#">NP_001158166</a>
<b>MIM</b>	<a href="#">612025</a>
<b>UniProt ID</b>	<a href="#">Q6PHW0</a>
<b>Chromosome Location</b>	6q25.1

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

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