

# Product information



**IYD, 24-214aa**

**Human, His-tagged, Recombinant, *E.coli***

**Cat. No. IBATGP2592**

**Full name:** iodotyrosine dehalogenase 1 isoform 3

**NCBI Accession No.:** NP\_001158167

**Synonyms:** C6orf71, DEHAL1, dJ422F24.1, TDH4

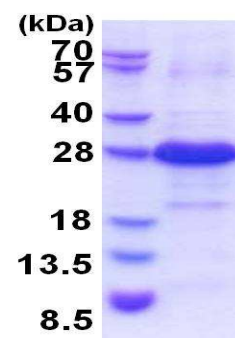
**Description:** IYD is an enzyme that catalyzes the oxidative NADPH-dependent deiodination of mono- and diiodotyrosine, which are the halogenated byproducts of thyroid hormone production. The N-terminus of the protein functions as a membrane anchor. Mutations in this gene cause congenital hypothyroidism due to dysmorphogenesis 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)

**Purity:** > 90% by SDS - PAGE

**Concentration:** 1 mg/ml (determined by Bradford assay)



15% SDS-PAGE (3ug)

**Sequences of amino acids:**

MGSSHHHHHH SSGLVPRGSH MGSDRSMEKK KGEPRTRAEA RPWVDEDLKD SSDLHQAEED ADEWQESEEN VEHIPFSHNH YPEKEMVKRS QEFYELLNKR RSVRFISNEQ VPMEVIDNVI RTAGTAPSGA HTEPWTFVVV KDPDVKHKIR KII EEEEEEEIN YMKRMGHRWW TDLKKLRTNW 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

**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.

**For research use only. This product is not intended or approved for human, diagnostics or veterinary use.**



Manufactured for:

Immuno-Biological Laboratories, Inc. (IBL-America)  
8201 Central Ave. NE, Suite P, Minneapolis, Minnesota 55432, USA  
Phone: (888) 523-1246 Fax.: (763) 780-2988  
Email: [info@ibl-america.com](mailto:info@ibl-america.com) Web: [www.ibl-america.com](http://www.ibl-america.com)