

IYD Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP9837a**Specification**

IYD Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [Q6PHW0](#)**IYD Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 389434**Other Names**

Iodotyrosine dehalogenase 1, IYD-1, IYD, C6orf71, DEHAL1

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

IYD Antibody (N-term) Blocking Peptide - Protein Information**Name** IYD {ECO:0000303|PubMed:25395621}**Function**

Catalyzes the dehalogenation of halotyrosines such as 3- bromo-L-tyrosine, 3-chloro-L-tyrosine, 3-iodo-L-tyrosine and 3,5- diiodo-L-tyrosine (PubMed:15289438, PubMed:18434651, PubMed:25395621, PubMed:28157283). During thyroid hormone biosynthesis, facilitates iodide salvage by catalysing the oxidative NADPH-dependent deiodination of the halogenated by-products of thyroid hormone production, moniodotyrosine (L-MIT) and diiodotyrosine (L-DIT) (PubMed:15289438, PubMed:18434651). The scavenged iodide can then reenter the hormone- producing pathways (PubMed:15289438, PubMed:18434651). Acts more efficiently on 3-iodo-L-tyrosine than 3,5-diiodo-L-tyrosine (PubMed:15289438).

Cellular Location

Cell membrane; Single-pass membrane protein. Cytoplasmic vesicle membrane

Tissue Location

Expressed at a high level in thyroid gland (at protein level). Expressed at a high level in thyroid gland and at lower level in kidney and trachea.

IYD Antibody (N-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

IYD Antibody (N-term) Blocking Peptide - Images**IYD Antibody (N-term) Blocking Peptide - Background**

This gene encodes 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.

IYD Antibody (N-term) Blocking Peptide - References

Thomas, S.R., et al. J. Biol. Chem. 284(29):19659-19667(2009)Otowa, T., et al. J. Hum. Genet. 54(2):122-126(2009)Afink, G., et al. J. Clin. Endocrinol. Metab. 93(12):4894-4901(2008)Moreno, J.C., et al. N. Engl. J. Med. 358(17):1811-1818(2008)Krause, K., et al. Eur. J. Endocrinol. 156(3):295-301(2007)