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DIO1 Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP6958a

Specification

DIO1 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession P49895

DIO1 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 1733

Other Names
Type I iodothyronine deiodinase, 5DI, DIOI, Type 1 DI, Type-I 5'-deiodinase, DIO1, ITDI1, TXDI1

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP6958a was selected from the N-term region of human DIO1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

DIO1 Antibody (N-term) Blocking Peptide - Protein Information

Name DIO1

Synonyms ITDI1, TXDI1

Function
Responsible for the deiodination of T4 (3,5,3',5'- tetraiodothyronine) into T3 (3,5,3'-triiodothyronine) and of T3 into T2 (3,3'-diiodothyronine). Plays a role in providing a source of plasma T3 by deiodination of T4 in peripheral tissues such as liver and kidney.

Cellular Location
Endoplasmic reticulum membrane; Single-pass membrane protein

DIO1 Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

DIO1 Antibody (N-term) Blocking Peptide - Images

DIO1 Antibody (N-term) Blocking Peptide - Background

DIO1 is a thiol-requiring propylthiouracil-sensitive oxidoreductase. It activates thyroid hormone by converting the prohormone thyroxine (T4) by outer ring deiodination (ORD) to bioactive 3,3',5-triiodothyronine (T3). It also degrades both hormones by inner ring deiodination (IRD).

DIO1 Antibody (N-term) Blocking Peptide - References

Landa,I., et.al., PLoS Genet. 5 (9), E1000637 (2009)