

DIO2 Antibody (Center) Blocking Peptide Synthetic peptide Catalog # BP8718c

## Specification

# **DIO2 Antibody (Center) Blocking Peptide - Product Information**

Primary Accession

### <u>Q92813</u>

## **DIO2** Antibody (Center) Blocking Peptide - Additional Information

Gene ID 1734

**Other Names** Type II iodothyronine deiodinase, 5DII, DIOII, Type 2 DI, Type-II 5'-deiodinase, DIO2, ITDI2, TXDI2

## Target/Specificity

The synthetic peptide sequence used to generate the antibody <a href=/products/AP8718c>AP8718c</a> was selected from the Center region of human DIO2. 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.

### **DIO2 Antibody (Center) Blocking Peptide - Protein Information**

Name DIO2

Synonyms ITDI2, TXDI2

#### Function

Responsible for the deiodination of T4 (3,5,3',5'- tetraiodothyronine) into T3 (3,5,3'-triiodothyronine). Essential for providing the brain with appropriate levels of T3 during the critical period of development.

Cellular Location Membrane; Single-pass membrane protein

#### **Tissue Location**

Isoform 1 is expressed in the lung, trachea, kidney, heart, skeletal muscle, placenta, fetal brain and several regions of the adult brain (PubMed:8755651, PubMed:11165050). Isoform 2 is



expressed in the brain, heart, kidney and trachea (PubMed:11165050)

# DIO2 Antibody (Center) Blocking Peptide - Protocols

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

### <u>Blocking Peptides</u>

## DIO2 Antibody (Center) Blocking Peptide - Images

## DIO2 Antibody (Center) Blocking Peptide - Background

DIO2 belongs to the iodothyronine deiodinase family. It activates thyroid hormone by converting the prohormone thyroxine (T4) by outer ring deiodination (ORD) to bioactive 3,3',5-triiodothyronine (T3).

### **DIO2 Antibody (Center) Blocking Peptide - References**

He,B.,et.al., Prog. Neuropsychopharmacol. Biol. Psychiatry 33 (6), 986-990 (2009)Heemstra,K.A., et.al., J. Clin. Endocrinol. Metab. 94 (6), 2144-2150 (2009)