

DIO3 Polyclonal Antibody

Description

Product type	Primary Antibody
Code	BT-AP02614
Host	Rabbit
Isotype	IgG
Size	20ul, 50ul, 100ul
Immunogen	The antiserum was produced against synthesized peptide derived from human DIO3. AA range:17-66
Mol wt	31451
Species reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Recommended application	WB, ELISA
Concentration	1 mg/ml
Full name	DIO3 Antibody
Synonyms	DIO3; ITDI3; TXDI3; Type III iodothyronine deiodinase; 5DIII; DIOIII; Type 3 DI; Type-III 5'-deiodinase

This product is for research use only, not for use in human, therapeutic or diagnostic procedure.

Background

Deiodinase, iodothyronine, type III encoded by this intronless gene (DIO3) belongs to the iodothyronine deiodinase family. It catalyzes the inactivation of thyroid hormone by inner ring deiodination of the prohormone thyroxine (T4) and the bioactive hormone 3,3',5'-triiodothyronine (T3) to inactive metabolites, 3,3',5'-triiodothyronine (RT3) and 3,3'-diiodothyronine (T2), respectively. This enzyme is highly expressed in pregnant uterus, placenta, fetal and neonatal tissues, and thought to prevent premature exposure of developing fetal tissues to adult levels of thyroid hormones. It regulates circulating fetal thyroid hormone concentrations, and thus plays a critical role in mammalian development. Knockout mice lacking this gene exhibit abnormalities related to development and reproduction, and increased activity of this enzyme in infants with hemangiomas causes severe hypothyroidism. This protein is a selenoprotein, containing the rare selenocysteine (Sec) amino acid at its active site. Sec is encoded by the UGA codon, which normally signals translation termination. The 3' UTRs of selenoprotein mRNAs contain a conserved stem-loop structure, designated the Sec insertion sequence (SECIS) element, that is necessary for the recognition of UGA as a Sec codon rather than as a stop signal.

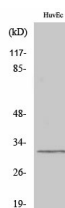
Recommended Dilution

WB: 1: 500 - 1: 2000

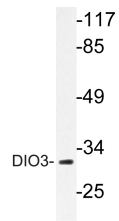
ELISA: 1: 20000

Not yet tested in other applications.

Images



Western Blot analysis of various cells using DIO3 Polyclonal Antibody



Western blot analysis of lysate from HUVEC cells, using DIO3 antibody.

Storage

-20°C for one year

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