

DIO3 Rabbit Polyclonal Antibody



CAB6900

Product Information

Size:

20uL, 50uL, 100uL, 200uL

Observed MW:

34kDa

Calculated MW:

33kDa

Applications:

WB

Reactivity:

Human

Antibody Information

Recommended dilutions:

WB 1:500 - 1:2000

Source:

Rabbit

Isotype:

IgG

Purification:

Affinity purification

Protein Background

The protein encoded by this intronless gene 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.

Immunogen information

Gene ID:

1735

Uniprot

P55073

Synonyms:

DIO3; 5DIII; D3; DIOIII; TXDI3

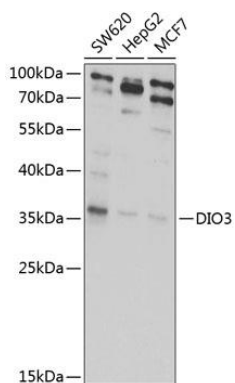
Immunogen:

Recombinant fusion protein containing a sequence corresponding to amino acids 70-170 of human DIO3 (NP_001353.4).

Storage:

Store at -20°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

Product Images



Western blot analysis of extracts of various cell lines, using DIO3 antibody (CAB6900) at 1:1000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (CABS014) at 1:10000 dilution. Lysates/proteins: 25ug per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (CABM00020). Exposure time: 90s.