# ABclonal®

# **DIO3 Rabbit pAb**

Catalog No.: A6900 4 Publications

### **Basic Information**

#### **Observed MW**

34kDa

#### **Calculated MW**

34kDa

#### Category

Polyclonal Antibody

#### **Applications**

WB, ELISA

#### **Cross-Reactivity**

Human

# **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.

#### **Recommended Dilutions**

WB 1:500 - 1:2000

**ELISA** 

Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

# **Immunogen Information**

**Gene ID**Swiss Prot
P55073

#### **Immunogen**

Recombinant protein (or fragment). This information is considered to be commercially sensitive.

# **Synonyms**

D3; 5DIII; TXDI3; DIOIII; DIO3

## **Contact**

www.abclonal.com

#### **Product Information**

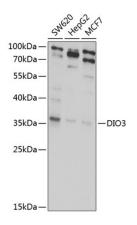
SourceIsotypePurificationRabbitIgGAffinity purification

#### Storage

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.02% sodium azide,50% glycerol,pH7.3.

# **Validation Data**



Western blot analysis of various lysates using DIO3 Rabbit pAb (A6900) at 1:1000 dilution.

Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000

Lysates/proteins: 25µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 90s.

dilution.