### For Research Use Only

# DIO1 Polyclonal antibody

Catalog Number: 11790-1-AP 14 Publications



**Basic Information** 

Catalog Number: GenBank Accession Number: 11790-1-AP BC017955 GeneID (NCBI): Size: 650 ug/ml 1733 **UNIPROT ID:** Source: Rabbit P49895 Full Name:

deiodinase, iodothyronine, type I

Calculated MW: Immunogen Catalog Number: AG2410 249 aa, 29 kDa Observed MW:

29 kDa, 13 kDa

**Applications** 

**Tested Applications:** 

Isotype:

WB, IHC, IF/ICC, FC (Intra), ELISA

Cited Applications: WB, IHC, IF

Species Specificity: human, mouse, rat **Cited Species:** human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

**Positive Controls:** 

WB: mouse lung tissue, HeLa cells, mouse ovary tissue, rat lung tissue, U-937 cells, A549 cells

**Purification Method:** 

WB 1:500-1:2000 IHC 1:50-1:500

IF/ICC 1:50-1:500

Antigen affinity purification

Recommended Dilutions:

IHC: human liver cancer tissue, human kidney tissue,

human ovary tumor tissue IF/ICC: A549 cells,

## **Background Information**

DIO1(Type I iodothyronine deiodinase) is also named as ITDI1, TXDI1,5DI,DIOI and belongs to the iodothyronine deiodinase family. It is a membrane selenoprotein that catalyzes the deiodination of L-thyroxine to the biologically active thyroid hormone 3,3',5-triiodothyronine.DIO1 is located in liver, kidney, and thyroid,which has both ORD and IRD activities(PMID: 9389495). It has some isoforms produced by alternative splicing with the MW of 29 kDa, 21 kDa, 13 kDa, 23 kDa, 19 kDa, 4 kDa, 13 kDa, 9 kDa and 10 kDa.

#### **Notable Publications**

Author	Pubmed ID	Journal	Application
Paula B M De Andrade	26441673	Front Physiol	WB
B Chellan	33122797	Sci Rep	WB
Xiang Li	35553364	Breast Cancer	WB

Storage

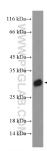
Storage:

Store at -20°C. Stable for one year after shipment.

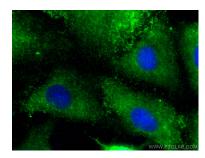
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

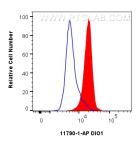
## Selected Validation Data



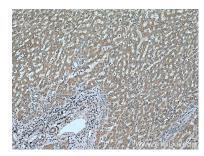
mouse lung tissue were subjected to SDS PAGE followed by western blot with 11790-1-AP (DIO1 Antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



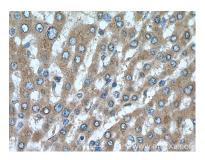
Immunofluorescent analysis of (-20°C Ethanol) fixed A549 cells using DIO 1 antibody (11790-1-AP) at dilution of 1:200 and Coralite®488-Conjugated AffiniPure Goat Anti-Rabbit  $\lg G(H+L)$ .



1x10^6 HeLa cells were intracellularly stained with 0.25 ug DIO1 Polyclonal antibody (11790-1-AP) and Coralite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Rabbit IgG control Rabbit PolyAb (30000-0-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunohistochemical analysis of paraffinembedded human liver cancer tissue slide using 11790-1-AP (DIO 1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human liver cancer tissue slide using 11790-1-AP (DIO 1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).