For Research Use Only

DIO1 Polyclonal antibody

Catalog Number:11790-1-AP 14 Publications

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Basic Information

Catalog Number:
11790-1-AP

Size:
150ul , Concentration: 650 ug/ml by Nanodrop and 447 ug/ml by Bradford method using BSA as the standard;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG2410

GenBank Accession Number:
BC017955

GeneID (NCBI):
1733

UNIPROT ID:
P49895

Full Name:
deiodinase, iodothyronine, type I

Calculated MW:
249 aa, 29 kDa

Observed MW:
29 kDa, 13 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:500-1:2000
IHC 1:50-1:500
IF/ICC 1:50-1:500

Applications

Tested Applications:
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

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

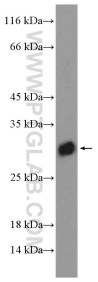
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

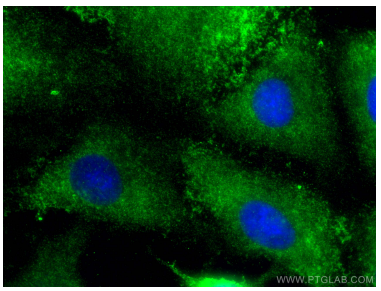
*** 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

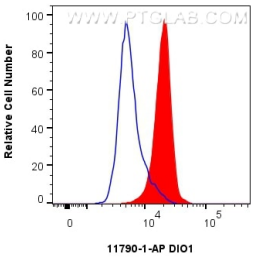
Selected Validation Data



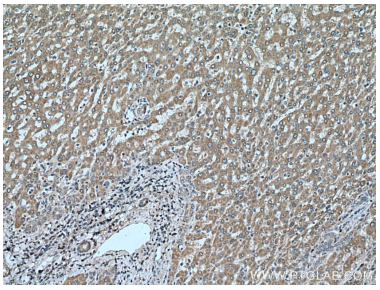
mouse lung tissue were subjected to SDS PAGE followed by western blot with 11790-1-AP (DIO1 Antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



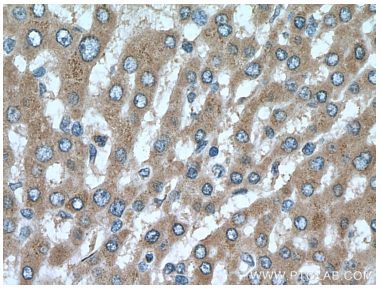
Immunofluorescent analysis of (-20°C Ethanol) fixed A549 cells using DIO1 antibody (11790-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



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 paraffin-embedded human liver cancer tissue slide using 11790-1-AP (DIO1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 11790-1-AP (DIO1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).