For Research Use Only

DIO1 Polyclonal antibody

Catalog Number:11790-1-AP 16 Publications

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Basic Information

Catalog Number:
11790-1-AP

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
FC (Intra): 0.25 ug per 10^6 cells in a 100 ul suspension

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, zebrafish

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,

FC (Intra) : HeLa 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

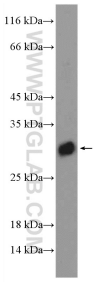
Storage

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

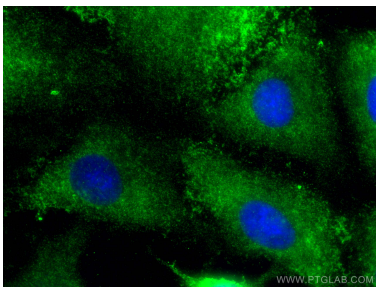
For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

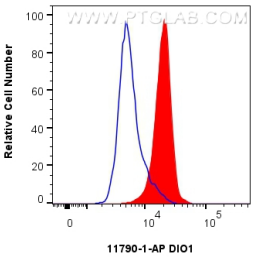
Selected Validation Data



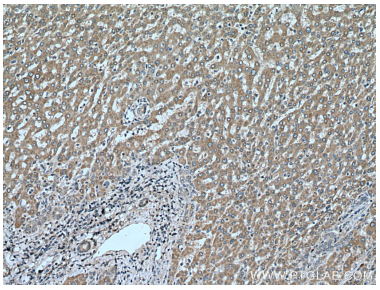
mouse lung tissue were subjected to SDS PAGE followed by western blot with 11790-1-AP (DIO1 Antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



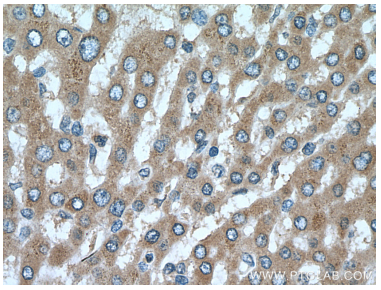
Immunofluorescent analysis of (-20°C Ethanol) fixed A549 cells using DIO1 antibody (11790-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



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 isotype control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer.



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).