**Basic Information**

**Catalog Number:** 11790-1-AP

**Size:** 67 μg/150 μl

**Source:** Rabbit

**Isotype:** IgG

**Purification Method:** Antigen affinity purification

**Immunogen Catalog Number:** AG2410

**GenBank Accession Number:** BC017955

**Gene ID (NCBI):** 1733

**Full Name:** deiodinase, iodothyronine, type I

**Recommended Dilutions:**

- **WB:** 1:500-1:2000
- **IP:** 0.5-4.0 μg for IP and 1:500-1:2000 for WB
- **IHC:** 1:200-1:200
- **IF:** 1:50-1:500

**Applications**

**Tested Applications:** FC, IF, IHC, IP, WB, ELISA

**Cited Applications:** IF, IHC, WB

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

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

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

**Storage**

**Storage:** Store at -20ºC. Stable for one year after shipment.

**Storage Buffer:** PBS with 0.1% sodium azide and 50% glycerol pH 7.3.

**Aliquoting:** unnecessary for -20ºC storage

**GenBank Accession Number:** BC017955

**Gene ID (NCBI):** 1733

**Full Name:** deiodinase, iodothyronine, type I

**Calculated MW:** 248 kDa, 29 kDa

**Observed MW:** 13 kDa, 29 kDa

**Applications**

**Tested Applications:** FC, IF, IHC, IP, WB, ELISA

**Cited Applications:** IF, IHC, WB

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

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

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

**Background Information**

DIO1 (Type I iodothyronine deiodinase) is also named as TDI1, TDI2, DIO1, DIO1I, 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 9 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**

<table>
<thead>
<tr>
<th>Author</th>
<th>Pubmed ID</th>
<th>Journal</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paula B M De Andrade</td>
<td>26441673</td>
<td>Front Physiol</td>
<td>WB</td>
</tr>
<tr>
<td>Jyoti Srivastava</td>
<td>25944609</td>
<td>J Biol Chem</td>
<td>WB, IHC</td>
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<tr>
<td>Julie Calonne</td>
<td>30873123</td>
<td>Front Endocrinol (Lausanne)</td>
<td>WB</td>
</tr>
</tbody>
</table>

**Storage**

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**Aliquoting:** unnecessary for -20ºC storage

**For technical support and original validation data for this product please contact:**

T: 1 (888) 4PTGLAB (4-784-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

E: proteintech@ptglab.com

W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.
A549 cells 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.

100UI HeLa cells were stained with 0.20ug DIO1 antibody (11790-1-AP, red) and control antibody (blue). Fixed with 90% MeOH.

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.

IP Result of anti-DIO1 (IP:11790-1-AP, 4ug; Detection:11790-1-AP 1:1000) with A549 cells lysate 1200ug.

Immunohistochemical of paraffin-embedded human ovary tumor using 11790-1-AP (DIO1 antibody) at dilution of 1:50 (under 10x lens)

Immunohistochemical of paraffin-embedded human ovary tumor using 11790-1-AP (DIO1 antibody) at dilution of 1:50 (under 40x lens)

Immunofluorescent analysis of (10% Formaldehyde) fixed A549 cells using 11790-1-AP (DIO1 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated Anti-Rabbit IgG(H+L)