# abcam

# Product datasheet

# Anti-DIO2 antibody ab77779

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#### Overview

Product name Anti-DIO2 antibody

**Description** Rabbit polyclonal to DIO2

Host species Rabbit

Tested applications Suitable for: WB, ICC/IF

Species reactivity Reacts with: Mouse, Rat, Human

Predicted to work with: Goat, Cow, Pig, Xenopus laevis

**Immunogen** Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control This antibody gave a positive signal in the following human tissue lysates: Human Heart and

Placenta, Mouse retina, P0 Whole Brain and Rat Whole Brain. This antibody gave a positive

result when used in the following methanol fixed cell lines: SKNSH

General notes

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

**Properties** 

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising

agent. If you would like information about the formulation of a specific lot, please contact our

scientific support team who will be happy to help.

Purity Immunogen affinity purified

1

**Clonality** Polyclonal

**Isotype** IgG

#### **Applications**

The Abpromise guarantee Our Abpromise guarantee covers the use of ab77779 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	<b>★</b> ★ ★ ★ ★ (1)	Use a concentration of 1 µg/ml. Detects a band of approximately 31 kDa (predicted molecular weight: 31 kDa).
ICC/IF		Use a concentration of 5 µg/ml.

#### **Target**

**Function** Responsible for the deiodination of T4 (3,5,3',5'-tetraiodothyronine) into T3 (3,5,3'-

triiodothyronine). Essential for providing the brain with appropriate levels of T3 during the critical

period of development.

**Tissue specificity** Heart, skeletal muscle, placenta, fetal brain and several regions of the adult brain.

**Sequence similarities** Belongs to the iodothyronine deiodinase family.

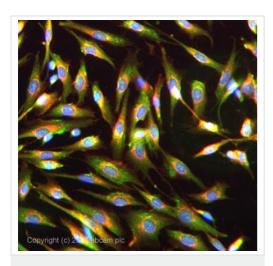
**Post-translational** Ubiquitinated by MARCH6, leading to its degradation by the proteasome. Deubiquitinated by

USP20 and USP33.

**Cellular localization** Membrane.

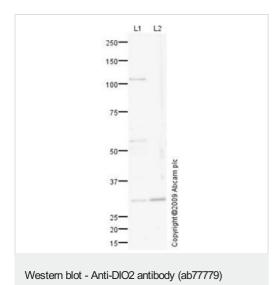
#### **Images**

modifications



Immunocytochemistry/ Immunofluorescence - Anti-DIO2 antibody (ab77779)

ICC/IF image of ab77779 stained SKNSH cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody ab77779 at 5µg/ml overnight at +4°C. The secondary antibody (green) was DyLight® 488 goat anti- rabbit (ab96899) lgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.



All lanes: Anti-DIO2 antibody (ab77779) at 1 µg/ml

Lane 1: Human heart tissue lysate - total protein (ab29431)

Lane 2 : Human placenta tissue lysate - total protein (ab29745)

Lysates/proteins at 10 µg per lane.

### **Secondary**

All lanes: Goat polyclonal to Rabbit lgG - H&L - Pre-Adsorbed

(HRP) at 1/3000 dilution

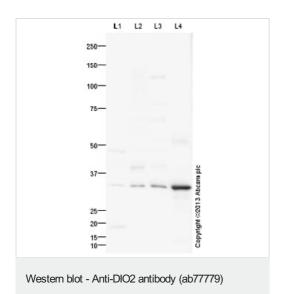
Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 31 kDa **Observed band size:** 31 kDa

Additional bands at: 105 kDa, 55 kDa. We are unsure as to the

identity of these extra bands.



All lanes: Anti-DIO2 antibody (ab77779) at 1 µg/ml

Lane 1: Mouse Retina Tissue Lysate

Lane 2: Mouse brain tissue lysate - total protein (0 days) (ab7188)

Lane 3: Brain (Rat) Tissue Lysate

Lane 4: Human heart tissue lysate - total protein (ab29431)

Lysates/proteins at 10 µg per lane.

## **Secondary**

**All lanes :** Goat polyclonal Secondary Antibody to Rabbit lgG - H&L (HRP) at 1/10000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 31 kDa **Observed band size:** 35 kDa

Additional bands at: 40 kDa, 55 kDa. We are unsure as to the

identity of these extra bands.

Exposure time: 3 minutes

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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