

Datasheet for ABIN4889606  
**anti-TDC2 antibody (C-Term)**



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1 Validation

## Overview

Quantity:	100 µg
Target:	TDC2
Binding Specificity:	C-Term
Reactivity:	Drosophila melanogaster
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This TDC2 antibody is un-conjugated
Application:	ELISA, Western Blotting (WB), Immunohistochemistry (IHC)

## Product Details

Immunogen:	Synthetic peptide derived from C-terminal part of Drosophila Tdc2 protein.
Specificity:	Reacts with Drosophila melanogaster 72 kDa Tdc2 protein
Purification:	Purified (protein A)

## Target Details

Target:	TDC2
Alternative Name:	Tyrosine Decarboxylase 2
Background:	Enzyme involved in tyrosine metabolism. Use Pyridoxal phosphate as cofactor.
Gene ID:	246620
UniProt:	<a href="#">A1Z6N4</a>

## Application Details

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Application Notes: Working dilution: Optimal dilutions should be determined by the end user.  
The following are guidelines only:  
IHC(1:200 - 1:1000) WB(1:200 - 1:2000)

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Restrictions: For Research Use only

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## Handling

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Format: Lyophilized

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Reconstitution: Must be reconstituted in distilled water.

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Concentration: 1 mg/mL

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Buffer: Tris 0,1M, glycine 0,1M, sucrose 2 %

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Storage: 4 °C/-20 °C

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Storage Comment: Lyophilized powder stable for a minimum of 2 years at -20°C. Store reconstituted antibodies at +4°C. For extended periods store in aliquots at -20°C. Antibodies are guaranteed for 6 month from date of receipt.

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Expiry Date: 24 months

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**Successfully validated (Immunofluorescence (IF))**

by [Department of Entomology, University of California, Riverside](#)

Report Number: 100812

Date: May 26 2017

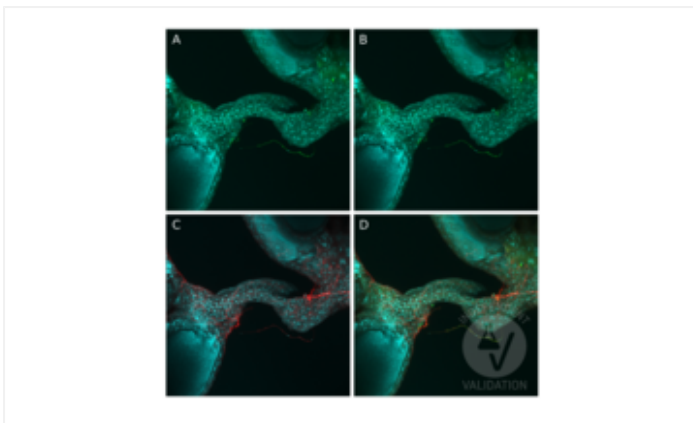
Target:	Tdc2
Lot Number:	13B1
Method validated:	Immunofluorescence (IF)
Positive Control:	<i>D. melanogaster</i> octopaminergic neurons labeled with Tdc2-Gal4 of the abdominal nerve to the ovary
Notes:	Passed. ABIN809182 labels octopaminergic neurons specifically and with no background.
Primary Antibody:	ABIN4889606
Secondary Antibody:	goat anti-rabbit AF542 conjugated antibody (Life Technologies)
Protocol:	<ul style="list-style-type: none"><li>• Dissect ovaries of <i>D. melanogaster</i> ETHR-Gal4/UAS-MCD8-GFP expressing GFP in octopaminergic neurons in cold Schneider's Insect Medium (S2; Sigma Aldrich, S01416).</li><li>• Transfer tissue to 2ml protein LoBind tubes (Eppendorf, 022431102) filled with S2 containing 2% paraformaldehyde (PFA) at RT.</li><li>• Fix tissue for 55min at RT while nutating.</li><li>• Wash tissue 4x 10min with 1.75ml PBS containing 0.5% Triton X-100 (PBST).</li><li>• Remove PBST and add 200µl 5% goat serum (GS; Thermo Fisher Scientific, 16210064) in PBST per tube.</li><li>• Incubate 1.5h at RT on a rotator.</li><li>• Remove blocking solution.</li><li>• Incubate with primary<ul style="list-style-type: none"><li>◦ rabbit anti-Tdc2 antibody (Tyrosine Decarboxylase 2) (C-Term) (antibodies-online, ABIN4889606, lot 13B1) diluted 1:200 in blocking solution.</li><li>◦ mouse anti-GFP (Thermo Fisher Scientific) diluted 1:500 in blocking solution.</li></ul></li><li>• Incubate for 4h at RT followed by 36-48h at 4°C on a rotator.</li><li>• Rinse tissue with 1.75ml PBST. Allow the tissue to settle to the bottom before removing the liquid.</li><li>• Wash tissue 3x 30min with 1.75ml PBST.</li><li>• Incubate with secondary 200µl secondary goat anti-rabbit AF542 conjugated antibody (Life Technologies) and goat anti-mouse AF488 conjugated antibody (Life Technologies, A11034) diluted 1:500 in blocking solution containing 0.5mg/ml DAPI.</li><li>• Incubate for 4h at RT followed by 72h at 4°C on a rotator.</li></ul>

- Rinse tissue with 1.75ml PBST. Allow the tissue to settle to the bottom before removing the liquid.
- Wash tissue 3x 30min with 1.75ml PBST.
- Add 1.75ml PBST containing 4% PFA at RT.
- Fix tissue for 5h at RT while nutating.
- Rinse tissue with 1.75ml PBST. Allow the tissue to settle to the bottom before removing the liquid.
- Wash tissue 4x 15min with 1.75ml PBST.
- Mount tissue on a poly-L-lysine (Sigma Aldrich, P1524-25MG) coated cover glass.
- Dehydrate tissue by covering the cover glass for 10min each with 30%, 50%, 75%, 95%, 100%, 100%, and 100% EtOH.
- Clearing using by covering the cover glass 3x 5min with xylene.
- Add 7 drops of dibutyl phthalate in xylene (DPX) on top of the mounted tissue.
- Seat cover glass face down gently onto a prepared slide with spacers.
- Let the slide dry for 48h at RT in a hood before viewing.

Experimental Notes:

- Staining of ETHR-Gal4/UAS-MCD8-GFP expressing GFP in octopaminergic neurons was performed as [previously described](#).
- ABIN4889606 worked fantastically. It labeled octopaminergic neurons specifically and with no background. Pictures are below. The well-characterized neurons labeled with Tdc2-Gal4 of the abdominal nerve to the ovary described in [Middleton et al. \(2006\)](#) overlapped with ABIN4889606. Staining with ABIN4889606 was stronger than Gal4 labeling.

Image for Validation report #100812



**Validation image no. 1 for anti-Tyrosine Decarboxylase 2 (TDC2) (C-Term) antibody (ABIN4889606)**

Immunostaining of *D. melanogaster* octopaminergic ovarian nerves expressing GFP (A), immunostaining of expressed GFP (green) (B), and of tdc2 with ABIN4889606 (red) (C).

The three channels are merged in D.