Product datasheet

Anti-DCDC2/RU2 antibody ab45868

Overview

Product name Anti-DCDC2/RU2 antibody
Description Goat polyclonal to DCDC2/RU2
Host species Goat
Tested applications Suitable for: IHC-P, ELISA, WB, IHC-FoFr, ICC/IF
Species reactivity Reacts with: Mouse, Rat, Human
Predicted to work with: Dog, Pig
Immunogen Synthetic peptide corresponding to Human DCDC2/RU2 aa 352-365 (internal sequence).
Sequence: C-DGEKANKDAEQKED
Positive control COS7 cell lysate.
General notes This product was previously labelled as DCDC2

Properties

Form Liquid
Storage instructions Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer Preservative: 0.02% Sodium Azide
Constituents: 0.5% BSA, Tris saline, pH 7.3
Purity Immunogen affinity purified
Purification notes Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide.
Clonality Polyclonal
Isotype IgG

Applications

Our Abpromise guarantee covers the use of ab45868 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
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<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
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<tbody>
<tr>
<td>IHC-P</td>
<td>Use a concentration of 5 - 10 µg/ml.</td>
<td></td>
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<tr>
<td>ELISA</td>
<td>Use at an assay dependent concentration.</td>
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<tr>
<td>WB</td>
<td>Use a concentration of 0.1 - 0.3 µg/ml. Detects a band of approximately 53 kDa (predicted molecular weight: 53 kDa).</td>
<td></td>
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<tr>
<td>IHC-FoFr</td>
<td>1/200.</td>
<td></td>
</tr>
<tr>
<td>ICC/IF</td>
<td>Use at an assay dependent concentration.</td>
<td></td>
</tr>
</tbody>
</table>

**Target**

**Function**

May be involved in neuronal migration during development of the cerebral neocortex.

**Tissue specificity**

Ubiquitously expressed. In brain, highly expressed in the entorhinal cortex, inferior temporal cortex, medial temporal cortex, hypothalamus, amygdala and hippocampus.

**Involvement in disease**

Defects in DCDC2 may be a cause of susceptibility to dyslexia type 2 (DYX2) [MIM:600202]; also known as specific reading disability type 2. Dyslexia is a relatively common, complex cognitive disorder that affects 5% to 10% of school-aged children. The disorder is characterized by an impairment of reading performance despite adequate motivational, educational and intellectual opportunities and in the absence of sensory or neurological disability.

**Sequence similarities**

Contains 2 doublecortin domains.

**Images**

[Western blot - Anti-DCDC2/RU2 antibody (ab45868)]

**All lanes**: Anti-DCDC2/RU2 antibody (ab45868) at 0.2 µg/ml

**Lane 1**: COS7 cell lysate transfected with full length recombinant human DCDC2/RU2

**Lane 2**: Untransfected control COS7 cells

**Predicted band size**: 53 kDa

**Observed band size**: 53 kDa

Primary incubation was 1 hour. Detected by chemiluminescence.
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-DCDC2/RU2 antibody (ab45868)

ab45868 (5µg/ml) staining of DCDC2/RU2 in paraffin embedded Human Cerebral Cortex following steamed antigen retrieval with citrate buffer pH 6 and AP-staining shows cytoplasm staining in select neurons.

Immunohistochemistry (PFA perfusion fixed frozen sections) - Anti-DCDC2/RU2 antibody (ab45868)

This image is courtesy of an Abreview submitted by Ruma Raha-Chowdhury

ab45868 staining rat optic nerve sections by IHC-FoFr. The animal was perfused with 4% paraformaldehyde and further post fixed with 4% paraformaldehyde overnight. The tissues were cryoprotected and sectioned using a cryostat. Staining with ab45868 at a 1/200 dilution in 0.3% TritonX with 0.1x PBS in 10% donkey serum was performed for 1h at 24°C. A donkey anti-goat Alexa488 polyclonal antibody at 1/1000 was used as the secondary antibody. β III tubulin can be observed in red (Alexa fluro 568 secondary). DCDC2/RU2 is expressed in the optic nerve.

Western blot - Anti-DCDC2/RU2 antibody (ab45868)

This image is courtesy of an abreview submitted by Ruma Raha-Chowdhury, University Of Cambridge, United Kingdom

All lanes : Anti-DCDC2/RU2 antibody (ab45868) at 1/500 dilution

Lane 1 : adult mouse heart
Lane 2 : adult mouse brain
Lane 3 : three-month old mouse brain
Lane 4 : 5 week old mouse brain
Lane 5 : mouse hippocampus including dentate gyrus
Lane 6 : mouse DRG
Lane 7 : primary mouse neuronal culture
Lane 8 : mouse astrocyte culture

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : DAKO cytomation
Conjugation: HRP

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 53 kDa  
**Observed band size:** 53 kDa  
**Additional bands at:** 15 kDa (possible non-specific binding), 37 kDa (possible non-specific binding)

**Exposure time:** 1 minute

Lane 1: adult mouse heart was run as a negative control  
Lanes 6, 7 & 8 were run as positive controls

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

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