Overview

Product name: Anti-Angiotensin II Type 1 Receptor antibody
Description: Rabbit polyclonal to Angiotensin II Type 1 Receptor
Host species: Rabbit
Specificity: This antibody recognizes isoforms AT-1A and AT-1B of the Angiotensin II type 1 receptor (AT-1r) in rat. We have received feedback that this antibody may not be specific for the antigen (see PubMed 22843099 on the References page).

Tested applications: Suitable for: WB, IHC-FoFr, IHC-P
Species reactivity: Reacts with: Mouse, Cow, Dog, Pig
Predicted to work with: Rat
Immunogen: Synthetic peptide:
PSDNMSSAKKPASC conjugated to KLH, corresponding to Internal sequence amino acids 341-355 of Angiotensin II Type 1 Receptor AT-1A. Synthetic peptide: SSSAKKSASFFEVE conjugated to KLH, corresponding to Internal sequence amino acids 346-359 of Angiotensin II Type 1 Receptor AT-1B.

Positive control: WB: Dog heart whole tissue lysate. IHC-P: Mouse and pig kidney tissue.

Properties

Form: Liquid
Storage buffer: pH: 7.40
Constituents: PBS, 0.81% Sodium chloride, 0.02% Potassium chloride, 0.04% Potassium phosphate, 0.16% Sodium phosphate
Purity: Immunogen affinity purified
Purification notes: Antisera was affinity purified by passage through two affinity columns, one cross-linked to AT-1A and the other with AT-1B, resulting in specificity to the sequence PSDNMSSAKKPASCFEVE (341-359).
Clonality: Polyclonal
Isotype: IgG

Applications

Our Abpromise guarantee covers the use of ab18801 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
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<td>WB</td>
<td></td>
<td>Use at an assay dependent concentration. Detects a band of approximately 45 kDa (predicted molecular weight: 41 kDa).</td>
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<tr>
<td>IHC-FoFr</td>
<td></td>
<td>Use at an assay dependent concentration. PubMed: 19706421</td>
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<tr>
<td>IHC-P</td>
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<td>1/100.</td>
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Target

Function: Receptor for angiotensin II. Mediates its action by association with G proteins that activate a phosphatidylinositol-calcium second messenger system.

Tissue specificity: Liver, lung, adrenal and adrenocortical adenomas.

Involvement in disease: Defects in AGTR1 are a cause of renal tubular dysgenesis (RTD) [OMIM:267430]. RTD is an autosomal recessive severe disorder of renal tubular development characterized by persistent fetal anuria and perinatal death, probably due to pulmonary hypoplasia from early-onset oligohydramnios (the Potter phenotype).

Sequence similarities: Belongs to the G-protein coupled receptor 1 family.

Post-translational modifications: C-terminal Ser or Thr residues may be phosphorylated.

Cellular localization: Cell membrane.

Images
Western blot - Anti-Angiotensin II Type 1 Receptor antibody (ab18801)

All lanes: Anti-Angiotensin II Type 1 Receptor antibody (ab18801) at 1/800 dilution

Lane 1: Dog heart whole tissue lysate at 50 µg
Lane 2: Dog heart whole tissue lysate at 25 µg
Lane 3: Dog heart whole tissue lysate at 10 µg
Lane 4: Dog heart whole tissue lysate at 5 µg
Lane 5: Dog heart whole tissue lysate at 2 µg

Secondary

All lanes: HRP conjugated donkey polyclonal antibody

Performed under reducing conditions.

Predicted band size: 41 kDa
Observed band size: 45 kDa
why is the actual band size different from the predicted?
Additional bands at: 32 kDa (possible non-specific binding)

Exposure time: 2 minutes

ab18801 staining Angiotensin II Type 1 in porcine kidney tissue by Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections).

Tissue was fixed with paraformaldehyde and blocked with 5% BSA for 30 minutes at 20°C; antigen retrieval was by heat mediation with a citrate buffer. Samples were incubated with primary antibody (1/100 in PBS + Triton X-100 + goat serum) for 24 hours at 4°C. An HRP secondary antibody was used.
ab18801 staining Angiotensin II Type 1 Receptor in Mouse kidney tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with paraformaldehyde and blocked with 5% BSA for 30 minutes at 20°C; antigen retrieval was by heat mediation in a citrate buffer. Samples were incubated with primary antibody (1/100 in PBS + Triton X100) for 24 hours at 4°C. An undiluted HRP-conjugated anti-rabbit polyclonal was used as the secondary antibody.

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

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