## Overview

<table>
<thead>
<tr>
<th><strong>Product name</strong></th>
<th>Anti-Angiotensin II Type 1 Receptor antibody</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>Rabbit polyclonal to Angiotensin II Type 1 Receptor</td>
</tr>
<tr>
<td><strong>Host species</strong></td>
<td>Rabbit</td>
</tr>
<tr>
<td><strong>Specificity</strong></td>
<td>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).</td>
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<tr>
<td><strong>Tested applications</strong></td>
<td>Suitable for: WB, IHC-FoFr, IHC-P</td>
</tr>
<tr>
<td><strong>Species reactivity</strong></td>
<td>Reacts with: Mouse, Cow, Dog, Pig</td>
</tr>
<tr>
<td><strong>Predicted to work with</strong>:</td>
<td>Rat</td>
</tr>
<tr>
<td><strong>Immunogen</strong></td>
<td>Synthetic peptide: PSDNMSKKPASC conjugated to KLH, corresponding to Internal sequence amino acids 341-355 of Angiotensin II Type 1 Receptor AT-1A. Synthetic peptide: SSSKASFFVE conjugated to KLH, corresponding to Internal sequence amino acids 346-359 of Angiotensin II Type 1 Receptor AT-1B.</td>
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<tr>
<td><strong>Positive control</strong></td>
<td>WB: Dog heart whole tissue lysate. IHC-P: Mouse and pig kidney tissue.</td>
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</table>

## Properties

<table>
<thead>
<tr>
<th><strong>Form</strong></th>
<th>Liquid</th>
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<tbody>
<tr>
<td><strong>Storage instructions</strong></td>
<td>Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.</td>
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</tbody>
</table>
| **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 PSDNMSKKPASCFFEVE (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.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<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>
</tr>
<tr>
<td>IHC-FoFr</td>
<td></td>
<td>Use at an assay dependent concentration. PubMed: 19706421</td>
</tr>
<tr>
<td>IHC-P</td>
<td>⭐⭐⭐⭐⭐</td>
<td>1/100.</td>
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</tbody>
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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) [MIM: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.
Western blot - Anti-Angiotensin II Type 1 Receptor antibody (ab18801)

This image is courtesy of an Abreview submitted by Dr Sudhish Mishra

**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.

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