

# AGTR1 Antibody

Catalog # ASC10977

## Product Information

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<b>Application</b>	WB, IF, E, IHC-P
<b>Primary Accession</b>	<a href="#">P30556</a>
<b>Other Accession</b>	<a href="#">EAW78909</a> , <a href="#">119599315</a>
<b>Reactivity</b>	Human, Mouse, Rat
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG
<b>Calculated MW</b>	41061
<b>Concentration (mg/ml)</b>	1 mg/mL
<b>Conjugate</b>	Unconjugated
<b>Application Notes</b>	AGTR1 antibody can be used for detection of AGTR1 by Western blot at 1 - 2 $\mu$ g/mL. Antibody can also be used for immunohistochemistry starting at 2.5 $\mu$ g/mL. For immunofluorescence start at 20 $\mu$ g/mL.

## Additional Information

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<b>Gene ID</b>	185
<b>Other Names</b>	Type-1 angiotensin II receptor, AT1AR, AT1BR, Angiotensin II type-1 receptor, AT1, AGTR1, AGTR1A, AGTR1B, AT2R1, AT2R1B
<b>Target/Specificity</b>	AGTR1;
<b>Reconstitution &amp; Storage</b>	AGTR1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
<b>Precautions</b>	AGTR1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	AGTR1 ( <a href="#">HGNC:336</a> )
<b>Function</b>	Receptor for angiotensin II, a vasoconstricting peptide, which acts as a key regulator of blood pressure and sodium retention by the kidney (PubMed: <a href="#">15611106</a> , PubMed: <a href="#">1567413</a> , PubMed: <a href="#">25913193</a> , PubMed: <a href="#">26420482</a> , PubMed: <a href="#">30639100</a> , PubMed: <a href="#">32079768</a> , PubMed: <a href="#">8987975</a> ). The activated receptor in turn couples to G-alpha proteins G(q) (GNAQ, GNA11, GNA14 or GNA15) and thus activates phospholipase C and increases the cytosolic Ca(2+) concentrations, which in turn triggers cellular responses such as stimulation of protein kinase C (PubMed: <a href="#">15611106</a> ).

**Cellular Location**

Cell membrane; Multi-pass membrane protein

**Tissue Location**

Liver, lung, adrenal and adrenocortical adenomas.

## Background

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**AGTR1 Antibody:** Angiotensin II is a potent vasopressor hormone and a primary regulator of aldosterone secretion that acts through at least two types of receptors, AGTR1 and AGTR2. It is an important effector controlling blood pressure and volume in the cardiovascular system and plays a major role in the development of the mammalian kidney and urinary tract. AGTR1, the type 1 receptor, is thought to mediate the major cardiovascular effects of angiotensin II and may play a role in the generation of reperfusion arrhythmias following restoration of blood flow to ischemic or infarcted myocardium. AGTR1 has recently been found to regulate the differentiation of bone marrow-derived monocyte lineage progenitors from hematopoietic stem cells, indicating the diversity of the roles of AGTR1.

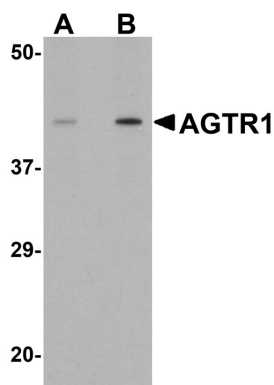
## References

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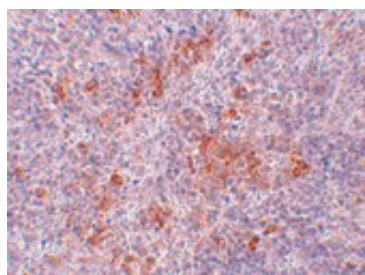
Mottl AK, Shoham DA, and North KE. Angiotensin II type 1 receptor polymorphisms and susceptibility to hypertension: A HuGE review. *Gen. in Med.*2008; 10:560-574.  
Miyazaki Y and Ichikawa I. Role of the angiotensin receptor in the development of the mammalian kidney and urinary tract. *Comp. Biochem. Physiol. A Mol. Integr. Physiol.*2001; 128:89-97.  
Tsubakimoto Y, Yamada H, Yokoi H, et al. Bone marrow angiotensin AT1 receptor regulates differentiation of monocyte lineage progenitors from hematopoietic stem cells. *Arterioscler. Thromb. Vasc. Biol.*2009; 29:1529-36.

## Images

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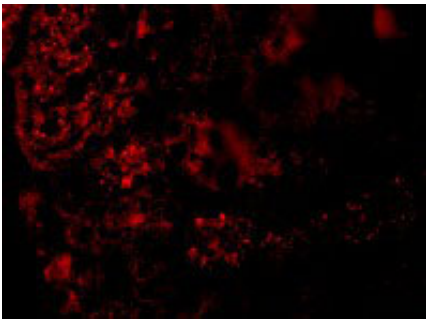


Western blot analysis of AGTR1 in mouse kidney tissue lysate with AGTR1 antibody at (A) 1 and (B) 2  $\mu\text{g/mL}$ .



Immunohistochemistry of AGTR1 in mouse kidney tissue with AGTR1 antibody at 2.5  $\mu\text{g/mL}$ .

Immunofluorescence of AGTR1 in Mouse Kidney cells with AGTR1 antibody at 20  $\mu\text{g/mL}$ .



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