

AGTR1 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10119b

Specification

AGTR1 Antibody (Center) - Product Information

Application	IF, WB, IHC-P, FC,E
Primary Accession	P30556
Other Accession	P34976 , P30555 , NP_114438.1 , NP_114038.1
Reactivity	Human
Predicted	Pig, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	211-240

AGTR1 Antibody (Center) - Additional Information

Gene ID 185

Other Names

Type-1 angiotensin II receptor, AT1AR, AT1BR, Angiotensin II type-1 receptor, AT1, AGTR1, AGTR1A, AGTR1B, AT2R1, AT2R1B

Target/Specificity

This AGTR1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 211-240 amino acids from the Central region of human AGTR1.

Dilution

IF~~1:25
WB~~1:1000
IHC-P~~1:10~50
FC~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

AGTR1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

AGTR1 Antibody (Center) - Protein Information

Name AGTR1 ([HGNC:336](#))

Function Receptor for angiotensin II, a vasoconstricting peptide, which acts as a key regulator of blood pressure and sodium retention by the kidney (PubMed:[15611106](#), PubMed:[1567413](#), PubMed:[25913193](#), PubMed:[26420482](#), PubMed:[30639100](#), PubMed:[32079768](#), PubMed:[8987975](#)). 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:[15611106](#)).

Cellular Location

Cell membrane; Multi-pass membrane protein

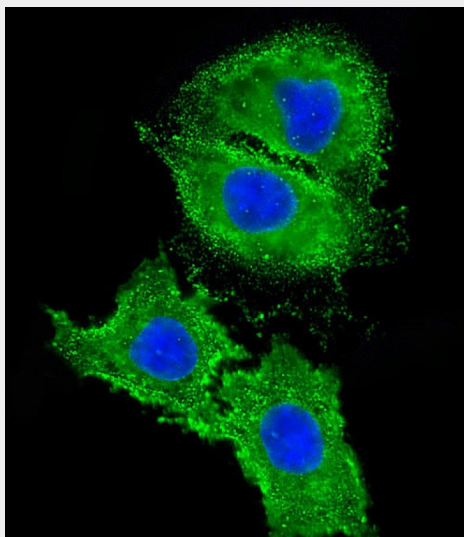
Tissue Location

Liver, lung, adrenal and adrenocortical adenomas.

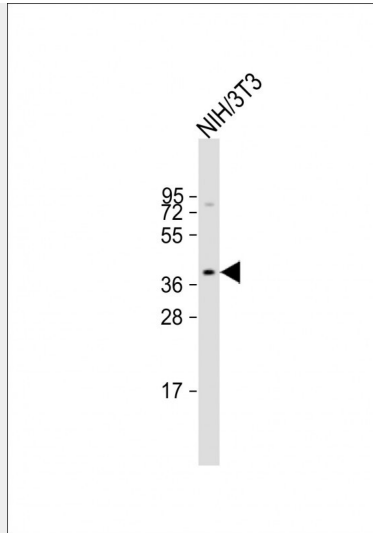
AGTR1 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

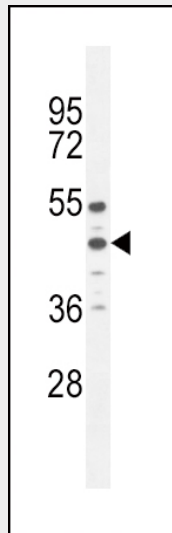
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

AGTR1 Antibody (Center) - Images

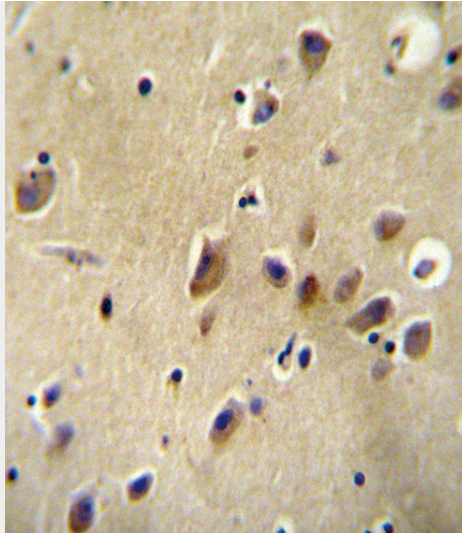
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HepG2 (human liver hepatocellular carcinoma cell line) cells labeling AGTR1 with AP10119B at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-rabbit IgG (NK179883) secondary antibody at 1/200 dilution (green). Immunofluorescence image showing membrane and cytoplasm staining on HepG2 cell line. The nuclear counter stain is DAPI (blue).



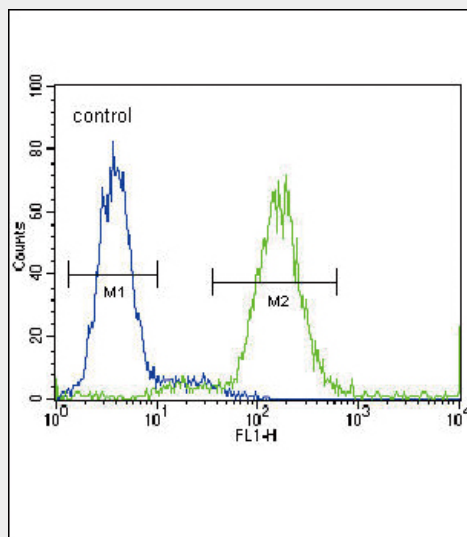
Anti-AGTR1 Antibody (Center) at 1:2000 dilution + NIH/3T3 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 41 kDa Blocking/Dilution buffer: 5% NFD/MTBST.



AGTR1 Antibody (Center) (Cat. #AP10119b) western blot analysis in HepG2 cell line lysates (35ug/lane). This demonstrates the AGTR1 antibody detected the AGTR1 protein (arrow).



AGTR1 Antibody (Center) (Cat. #AP10119b) immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the AGTR1 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



AGTR1 Antibody (Center) (Cat. #AP10119b) flow cytometric analysis of HepG2 cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

AGTR1 Antibody (Center) - Background

Angiotensin II is a potent vasopressor hormone and a primary regulator of aldosterone secretion. It is an important effector controlling blood pressure and volume in the cardiovascular system. It acts through at least two types of receptors. This gene encodes the type 1 receptor which is thought to mediate the major cardiovascular effects of angiotensin II. This gene may play a role in the generation of reperfusion arrhythmias following restoration of blood flow to ischemic or infarcted myocardium. It was previously thought that a related gene, denoted as AGTR1B, existed; however, it is now believed that there is only one type 1 receptor gene in humans. At least five transcript

variants have been described for this gene. Additional variants have been described but their full-length nature has not been determined. The entire coding sequence is contained in the terminal exon and is present in all transcript variants. [provided by RefSeq].

AGTR1 Antibody (Center) - References

Xu, M., et al. *Atherosclerosis* 213(1):191-199(2010)
Niu, W., et al. *Hypertens. Res.* 33(11):1137-1143(2010)
Procopciuc, L.M., et al. *Eur. J. Intern. Med.* 21(5):414-418(2010)
Romero, R., et al. *Am. J. Obstet. Gynecol.* 203 (4), 361 (2010) :
Schuur, M., et al. *J. Neurol. Neurosurg. Psychiatr.* (2010) In press :