

Catalog # AM1963B

AGTR1 Antibody (Center) Mouse Monoclonal Antibody (Mab)

Specification

AGTR1 Antibody (Center) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Antigen Region WB,E <u>P30556</u> <u>P34976, P30555, NP_114038.1, NP_114438.1</u> Human Pig, Rabbit Mouse Monoclonal IgM,k 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 mice immunized with a KLH conjugated synthetic peptide between 211-240 amino acids from the Central region of human AGTR1.

Dilution WB~~1:500~1000 E~~Use at an assay dependent concentration.

Format

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Euglobin precipitation followed by dialysis against PBS.

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 (<u>HGNC:336</u>)



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

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.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

AGTR1 Antibody (Center) - Images



AGTR1 Antibody (Center) (Cat. #AM1963b) western blot analysis in Hela cell line lysates (35µg/lane).This demonstrates the AGTR1 antibody detected the AGTR1 protein (arrow).

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 : AGTR1 Antibody (Center) - Citations

• The angiotensin type 2 receptor in the human adrenocortical zona glomerulosa and in aldosterone-producing adenoma: low expression and no functional role.