

Goat Anti-AGTR1 / AT1 Antibody

Peptide-affinity purified goat antibody Catalog # AF1036a

Specification

Goat Anti-AGTR1 / AT1 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Concentration Isotype Calculated MW WB, E <u>P30556</u> <u>NP_114438, 185, 11607 (mouse), 24180 (rat)</u> Human, Mouse, Rat Goat Polyclonal 100ug/200ul IgG 41061

Goat Anti-AGTR1 / AT1 Antibody - 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

Dilution WB~~1:1000 E~~N/A

Format 0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-AGTR1 / AT1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-AGTR1 / AT1 Antibody - 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:<a



href="http://www.uniprot.org/citations/15611106" target="_blank">15611106, PubMed:1567413, PubMed:25913193, PubMed:26420482, PubMed:30639100, 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.

Goat Anti-AGTR1 / AT1 Antibody - 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>

Goat Anti-AGTR1 / AT1 Antibody - Images



AF1036a (0.3 μ g/ml) staining of Mouse Liver lysate (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-AGTR1 / AT1 Antibody - 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.

Goat Anti-AGTR1 / AT1 Antibody - References

Renin angiotensin system polymorphisms in patients with metabolic syndrome (MetS). Procopciuc LM, et al. Eur J Intern Med, 2010 Oct. PMID 20816596.

A1166C genetic variation of the angiotensin II type I receptor gene and susceptibility to coronary heart disease: Collaborative of 53 studies with 20,435 cases and 23,674 controls. Xu M, et al. Atherosclerosis, 2010 Aug 4. PMID 20732682.

Association of the angiotensin II type I receptor gene +1166 A>C polymorphism with hypertension risk: evidence from a meta-analysis of 16474 subjects. Niu W, et al. Hypertens Res, 2010 Aug 12. PMID 20703234.

A genetic association study of maternal and fetal candidate genes that predispose to preterm prelabor rupture of membranes (PROM). Romero R, et al. Am J Obstet Gynecol, 2010 Jul 29. PMID 20673868.

Genetic risk factors for cerebral small-vessel disease in hypertensive patients from a genetically isolated population. Schuur M, et al. J Neurol Neurosurg Psychiatry, 2010 Jul 28. PMID 20667857.