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**Antibody to Angiotensin II receptor (AT-1r), affinity-purified  
RABBIT POLYCLONAL**

**Catalog Number:** AB-N27AP  
**Quantity:** 50 micrograms  
**Format:** PBS (0.14 M Sodium Chloride; 0.003 M Potassium Chloride; 0.002 M Potassium Phosphate; 0.01 M Sodium Phosphate; pH 7.4), with 0.1% sodium azide as preservative.  
**Host:** Rabbit  
**Immunogen:** peptide PSDNMSSSAKKPASC (amino acids 341-355 of AT-1A) or with SSSAKKSASFFEVE (amino acids 346-359 of AT-1B) conjugated to keyhole limpet hemocyanin (KLH)

**Background:**

The Angiotensin II type 1 receptor (AT-1r) is the primary effector of Angiotensin II, a key regulator of blood pressure and fluid homeostasis. It is involved in pathogenesis of several cardiovascular diseases such as hypertension, cardiac hypertrophy and congestive heart failure. Angiotensin II interacts with two types of G-protein coupled membrane receptors, AT-1r (type 1) and AT-2r (type 2). AT-1 has three isoforms in rat: AT-1A (359 aa), AT-1B (359 aa), and AT-1C (177 aa). Rat AT-1r's are predicted to contain seven transmembrane domains. The N-terminus is predicted to be extracellular, while the C-terminus is predicted to be cytoplasmic. AT-1r's are expressed in the liver, kidney, aorta, lung, uterus, ovary, spleen, heart, adrenal and vascular smooth muscle.

**Specificity and Preparation:**

This antibody recognizes isoforms AT-1A and AT-1B of the Angiotensin II type 1 receptor (AT-1r) in rat. The antisera was generated in rabbits by immunization with the peptide PSDNMSSSAKKPASC (amino acids 341-355 of AT-1A) or with SSSAKKSASFFEVE (amino acids 346-359 of AT-1B) conjugated to keyhole limpet hemocyanin (KLH). Antisera was then 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 PSDNMSSSAKKPASCFFEVE (341-359).

**Usage and Storage:**

Applications include immunohistochemistry (immunoperoxidase electron microscopy, 1:500)<sup>1</sup>. Store the antibody at -20°C for one year. Avoid repeated freezing and thawing. Gently spin down material before use; 5-10 seconds in a microfuge should be adequate.

**References:**

1. Wang G, Anrather J, Huang J, Speth RC, Pickel VM, Iadecola C (2004) NADPH oxidase contributes to angiotensin II signaling in the nucleus tractus solitarius. *J Neurosci* 24(24):5516-5524.

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