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Anti-Angiotensin Ⅱ receptor, type1(AGTR1), Rabbit-Polyclonal Antibody

Catalog No. GB-30074 **Quantity:** 100μg **Applications:** ELISA
Antigen species: Human **Reactivity:** Human
Host species: Rabbit **Form:** Peptide affinity purified antibody

Target description

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 that is thought to mediate the major cardiovascular effects of angiotensin II. AGTR1 may play 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 AGTR1B exists; however, it is now believed that there is only one AGTR1 gene. The gene expresses at least four transcript variants; additional variants have been described but their full length nature has not been determined. Exon 5 contains the entire coding sequence and is present in all transcript variants.

Antigen

This polyclonal antibody was raised by immunizing rabbit with a synthetic peptide GP72S of human angiotensin II receptor, type 1 (AGTR1), transcript variant 5.

Application

The antibody specificity was assayed by ELISA with the synthetic ADRB1 peptide antigen. The antibody titer is more than 100K for ELISA. It has not been tested in the other applications. However, for the first testing, we recommend 1/5,000 dilution for ELISA, 1/1000 dilution for Western blot analysis (WB) of recombinant protein, 1/400 dilution for tissue extracts or cell lysates, 1/100 dilution for immunohistochemistry (IHC) staining on frozen cryosections, 1/50 dilution for IHC staining on paraffin embedded sections.

Related Products

1. Anti-guanine nucleotide binding protein (G protein), q polypeptide (GNAQ), pAb (GB-30070)
2. Anti-luteinizing hormone/ choriogonadotropin receptor (LHCGR), pAb (GB30071)
3. Anti-adrenergic, beta-1-, receptor (ADRB1) pAb (GB-30072)
4. Anti-adrenergic, beta-2-, receptor, surface (ADRB2) pAb (GB-30073)
5. Anti-angiotensin II receptor, type 2 (AGTR2) pAb (GB-30075).

Ab dilution	Pre-bleed	Purified-Ab
1:10K	0.061	1.319
1:100K	0.057	0.209
1:1,000K	0.064	0.073
Titer		670 K

Antigen is coated on EIA strips at 1μg per well.

ELISA Protocol

Antigen is coated on EIA strips at 1μg per well. Add 200μl of blocking buffer and then wash wells with PBST buffer. Pre-bleed serum and peptide specific purified antibody GB-30074 is diluted in series as 10^4~10^6 folds and added in separate wells. Incubate antibody for 1hr. Wash unbound antibodies and add anti-rabbit IgG-HRP conjugate. Wash the plate and add substrate to develop color for 5 min. Read absorbance (ABS) at 650 nm. Amount of color is directly proportional to the amount of antibodies. Antibody titer is defined as >0.1 of ABS of antiserum minus pre-bleed serum.

Storage

It is supplied as peptide affinity purified antibody in lyophilized powder. Redissolve the powder with 100 microliter sterile water will restore to the original concentration 1mg/ml (1×PBS). Store at 4°C for short-term application. For long-term storage, aliquot and store at -20°C.

References

1. Jones, A., Dhamrait, S.S., Payne, J.R., Hawe, E., Li, P., Toor, I.S., Luong, L., Wootton, P.T., Miller, G.J., Humphries, S.E. and Montgomery, H.E. Genetic variants of angiotensin II receptors and cardiovascular risk in hypertension. *Hypertension* 42 (4), 500-506 (2003)
2. Boucard, A.A., Roy, M., Beaulieu, M.E., Lavigne, P., Escher, E., Guillemette, G. and Leduc, R. Constitutive activation of the angiotensin II type 1 receptor alters the spatial proximity of transmembrane 7 to the ligand-binding pocket. *J. Biol. Chem.* 278 (38), 36628-36636 (2003)