



Anti-Angiotensin II receptor, type2(AGTR2), Rabbit-Polyclonal Antibody

Catalog No. GB-30075
Antigen species: Human
Host species: Rabbit

Quantity: 100µg
Reactivity: Human
Form: Peptide affinity purified antibody

Applications: ELISA

Target description

Angiotensin II is a potent pressor 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 termed AT1 and AT2. AGTR2 belongs to a family 1 of G-protein coupled receptors. It is an integral membrane protein. It plays a role in the central nervous system and cardiovascular functions that are mediated by the renin-angiotensin system. This receptor mediates programmed cell death (apoptosis). In adults, it is highly expressed in myometrium with lower levels in adrenal gland and fallopian tube. It is highly expressed in fetal kidney and intestine. The human AGTR2 gene is composed of three exons and spans at least 5 kb. Exons 1 and 2 encode for 5' untranslated mRNA sequence and exon 3 harbors the entire uninterrupted open reading frame.

Antigen

This polyclonal antibody was raised by immunizing rabbit with a synthetic peptide located on the seven transmembrane domain (7tm_1) of human angiotensin II receptor, type 2 (AGTR2).

Application

The antibody specificity was assayed by ELISA with the synthetic AGTR2 peptide antigen. The antibody titer is more than 325K for ELISA. It has not been tested in the other applications. However, for the first testing, we recommend 1/5,000 dilution for ELISA, 1/1,000 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 (GB-30071)
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 1 (AGTR1) pAb (GB-30074)

Ab dilution	Pre-bleed	Purified-Ab
1:10,000	0.051	1.086
1:100,000	0.040	0.173
1:1000,000	0.037	0.045
Titer		325 K

Antigen is coated on EIA strips at 1µg per well and the concentration of test purified pAb is 1.0 mg/ml

ELISA Protocol

Add 200µl of blocking buffer and then wash wells with PBST buffer. Antiserum or peptide specific purified antibody GB-30075 is diluted in series as $10^4 \sim 10^6$ folds and added in separate wells. Incubate antibody for 1hr. Wash unbound antibodies and add anti-rabbit IgG-HRP conjugate. Wash the plates 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 is positive at >2 folds of ABS of control/Pre-Immune 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. Benndorf, R., Boger, R.H., Ergun, S., Steenpass, A. and Wieland, T. Angiotensin II type 2 receptor inhibits vascular endothelial growth factor-induced migration and in vitro tube formation of human endothelial cells. *Circ. Res.* 93 (5), 438-447 (2003)