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Anti-Adrenergic, beta-2-, receptor, surface (ADRB2), Rabbit-Polyclonal Antibody

Catalog No. GB-30073 **Quantity:** 100μg **Applications:** ELISA
Antigen species: Human **Reactivity:** Human
Host species: Rabbit **Form:** Peptide affinity purified antibody

Target description

This gene encodes beta-2-adrenergic receptor, which is a member of the G protein-coupled receptor superfamily. This receptor is directly associated with one of its ultimate effectors, the class C L-type calcium channel Ca (V) 1.2. This receptor-channel complex also contains a G protein, an adenylyl cyclase, cAMP-dependent kinase, and the counterbalancing phosphatase, PP2A. The assembly of the signaling complex provides a mechanism that ensures specific and rapid signaling by this G protein-coupled receptor. This gene contains no introns in either its coding or untranslated sequences. Different polymorphic forms, point mutations, and/or downregulation of this gene are associated with nocturnal asthma, obesity and type 2 diabetes.

Antigen

This polyclonal antibody was raised by immunizing rabbit with a synthetic peptide located near N-terminal of human adrenergic, beta-2 receptor (ADRB2).

Application

The antibody specificity was assayed by ELISA with the synthetic ADRB2 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, 1/1,000 dilution for Western blot analysis (WB) of recombinant protein, 1/400 dilution for tissue extracts or cell lysates, 1/100 dilution for immuno-histochemistry (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-angiotensin II receptor, type 1 (AGTR1) pAb (GB-30074).
5. Anti-angiotensin II receptor, type 2 (AGTR2) pAb (GB-30075).

Ab dilution	Pre-bleed	Purified-Ab
1:10K	0.051	1.091
1:100K	0.047	0.233
1:1000K	0.055	0.065
Titer		**493 K**

Concentration of test purified pAb is 1.0 mg/ml

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-30073 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. Eisenach, J.H., McGuire, A.M., Schwingler, R.M., Turner, S.T., Joyner, M.J. The Arg16/Gly beta2-adrenergic receptor polymorphism is associated with altered cardiovascular responses to isometric exercise. *Physiol. Genomics* 16 (3), 323-328 (2004)
2. Pereira, A.C., Floriano, M.S., Mota, G.F., Cunha, R.S., Herkenhoff, F.L., Mill, J.G. and Krieger, J.E. Beta2 adrenoceptor functional gene variants, obesity, and blood pressure level interactions in the general population. *Hypertension* 42 (4), 685-692 (2003)
3. Harrison, T., Samuel, B.U., Akompong, T., Hamm, H., Mohandas, N., Lomasney, J.W. and Haldar, K. Erythrocyte G protein-coupled receptor signaling in malarial infection. *Science* 301 (5640), 1734-1736 (2003)