



Anti-Prostaglandin D2 receptor (DP) (PTGDR), Rabbit-Polyclonal Antibody

Catalog No. GB-30096
Antigen species: Human
Host species: Rabbit

Quantity: 100 μ g
Reactivity: Human
Form: Peptide affinity purified antibody

Applications: ELISA

Target description

The protein encoded by this gene is a G-protein-coupled receptor. It has been shown to function as a prostanoid DP receptor. The activity of this receptor is mainly mediated by G-S proteins that stimulate adenylate cyclase resulting in an elevation of intracellular cAMP and Ca²⁺. Knockout studies in mice suggest that the ligand of this receptor, prostaglandin D2 (PGD₂), functions as a mast cell-derived mediator to trigger asthmatic responses.

Antigen

This polyclonal antibody was raised by immunizing rabbit with a synthetic peptide GP96 of human prostaglandin D2 receptor (DP) (PTGDR).

Application

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 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), α polypeptide (GNAQ), pAb (GB-30070)
2. Anti-luteinizing hormone/choriogonadotropin receptor (LHCGR), pAb (GB-30071)
3. Anti-adrenergic, β -1-, receptor (ADRB1) pAb (GB-30072)
4. Anti-adrenergic, β -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	0.083	1.133
1:100,000	0.064	0.226
1:1,000,000	0.059	0.076
Titer		437 K

Concentration of test purified pAb is 1mg/mL

ELISA Protocol

Antigen is coated on EIA strips at 1 μ g per well. Add 200 μ l of blocking buffer and then wash wells with PBST buffer. Pre-bleed serum and peptide specific purified antibody GB-30096 is diluted in series as 10⁴~10⁶ 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 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 \times PBS). Store at 4°C for short-term application. For long-term storage, aliquot and store at -20°C.

References

1. Angeli, V., Staumont, D., Charbonnier, A.S., Hammad, H., Gosset, P., Pichavant, M., Lambrecht, B.N., Capron, M., Dombrowicz, D. and Trottein, F. Activation of the D prostanoid receptor 1 regulates immune and skin allergic responses. *J. Immunol.* 172 (6), 3822-3829 (2004)
2. Iwasaki, M., Nagata, K., Takano, S., Takahashi, K., Ishii, N. and Ikezawa, Z. Association of a new-type prostaglandin D2 receptor CRTH2 with circulating T helper 2 cells in patients with atopic dermatitis. *J. Invest. Dermatol.* 119 (3), 609-616 (2002)

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