



Product Information Sheet

Polyclonal Anti-Alpha 2 Adrenergic Receptor, ADRA2(Magnetic Bead Conjugate)

Catalogue No. PA1003-M

Lot No. 09C01

Ig type: rabbit IgG

Size: 100µg/vial

Specificity

Human, mouse, rat.

No cross reactivity with other proteins.

Recommended application

immunoprecipitation.(IP)

Immunogen

A synthetic peptide corresponding to a sequence mapping near the C-terminal of human ADRA2, identical to the related rat and mouse sequence.

Purity

Immunogen affinity purified.

Contents

Each vial contains 1mg/ml Magnetic Bead in PBS, pH 7.2, 0.05mg NaN₃.

Storage

Store at 4°C for frequent use.

Description

This Antagene antibody is immobilized by the covalent reaction of hydrazinonicotinamide-modified antibody with formylbenzamide-modified magnetic beads. It is useful for immunoprecipitation

BACKGROUND

Alpha-2-adrenergic receptor (ADRA2), also known as platelet type adrenoceptor alpha-2A, is a member of G protein-coupled receptor superfamily. This gene, which can identify a Dra I RFLP of the ADRAR gene, mapped to 10q23-q25, is found in the distal region of mouse chromosome 19 and abundantly expressed in giant cell. ADRA2 acts a critical role in regulating neurotransmitter release from sympathetic nerves and from adrenergic neurons in the central nervous system. It has 3 highly homologous subtypes: ADRA2A; ADRA2B and ADRA2C. Studies in mouse suggested that both the ADRA2A and ADRA2C subtypes are required for normal presynaptic control of transmitter release from sympathetic nerves in the heart and from central noradrenergic neurons. ADRA2A receptors inhibited transmitter release at high stimulation frequencies, whereas the ADRA2C subtype modulated neurotransmission at lower levels of nerve activity.

REFERENCE

1. Hoehe, M. R.; Berrettini, W. H.; Lentes, K.-U.:Dra I identifies a two allele DNA polymorphism in the human alpha-2-adrenergic receptor gene (ADRAR), using a 5.5 kb probe (p ADRAR). *Nucleic Acids Res.* 16: 9070 only, 1988.
2. Yang-Feng, T. L.; Kobilka, B. K.; Caron, M. G.; Lefkowitz, R. J.; Francke, U.:Chromosomal assignment of genes for an alpha-adrenergic receptor (ADRAR) and for another member of this receptor family coupled to guanine nucleotide regulatory proteins (RG21). (Abstract) *Cytogenet. Cell Genet.* 46: 722-723, 1987.
3. Hein, L.; Altman, J. D.; Kobilka, B. K. :Two functionally distinct alpha-2-adrenergic receptors regulate sympathetic neurotransmission. *Nature* 402: 181-184, 1999.