10320 Camino Santa Fe, Suite A
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ADRA2C Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP14582b

Specification

ADRA2C Antibody (C-term) Blocking Peptide - Product Information

Primary Accession P18825

ADRA2C Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 152

Other Names
Alpha-2C adrenergic receptor, Alpha-2 adrenergic receptor subtype C4, Alpha-2C adrenoreceptor, Alpha-2C adrenoceptor, Alpha-2CAR, ADRA2C, ADRA2L2, ADRA2RL2

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ADRA2C Antibody (C-term) Blocking Peptide - Protein Information

Name ADRA2C (HGNC:283)

Synonyms ADRA2L2, ADRA2RL2

Function
Alpha-2 adrenergic receptors are G protein-coupled receptors for catecholamines that activate the G(i/o) protein pathway, thereby promoting adenylyl cyclase inhibition, ERK1/2 stimulation, and voltage- gated calcium channels suppression (PubMed:2842764). Control a variety of physiological processes, such as regulation of blood pressure, lipolysis and insulin release (PubMed:2842764). ADRA2A and ADRA2C mediates the presynaptic feedback inhibition of neurotransmitter release from noradrenergic nerve terminals in sympathetic and central nervous systems. ADRA2A inhibits transmitter release at high stimulation frequencies, whereas ADRA2C modulates neurotransmission at lower levels of nerve activity (By similarity). The rank order of potency for physiological agonists of ADRA2C is epinephrine > norepinephrine > dopamine (PubMed:2842764).

Cellular Location

Cell membrane; Multi-pass membrane protein {ECO:0000269|Ref.8}

ADRA2C Antibody (C-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

ADRA2C Antibody (C-term) Blocking Peptide - Images

ADRA2C Antibody (C-term) Blocking Peptide - Background

Alpha-2-adrenergic receptors are members of the Gprotein-coupled receptor superfamily. They include 3 highlyhomologous subtypes: alpha2A, alpha2B, and alpha2C. These receptorshave a critical role in regulating neurotransmitter release fromsympathetic nerves and from adrenergic neurons in the centralnervous system. The mouse studies revealed that both the alpha2Aand alpha2C subtypes were required for normal presynaptic controlof transmitter release from sympathetic nerves in the heart andfrom central noradrenergic neurons. The alpha2A subtype inhibitedtransmitter release at high stimulation frequencies, whereas thealpha2C subtype modulated neurotransmission at lower levels ofnerve activity. This gene encodes the alpha2C subtype, whichcontains no introns in either its coding or untranslated sequences.

ADRA2C Antibody (C-term) Blocking Peptide - References

Chen, Q.J., et al. Clin. Biochem. 43(15):1201-1204(2010)Maqbool, A., et al. J. Hypertens. 28(10):2084-2093(2010)Saus, E., et al. J Psychiatr Res 44(14):971-978(2010)Gao, Y., et al. Ophthalmology (2010) In press :Montgomery, M.D., et al. Br. J. Pharmacol. 159(4):820-830(2010)