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alpha2B Adrenergic Receptor. Mouse Monoclonal Antibody

Background

The rat alpha 2b adrenergic receptor is a G protein coupled receptor which acts through Gi2 and is responsible for Cellular communication and signal transduction. These receptors are linked to pertussis toxin-sensitive G proteins. Agonist binding leads to inhibition of adenylyl cyclase, inhibition of Ca(2+) channels and activation of K(+) channels. Recently, three distinct subtypes of alpha(2)-AR were described, alpha(2A)-AR, alpha (2B)-AR and alpha(2C)-AR. At present, it is unknown which of these alpha (2)-AR subtype(s) may regulate insulin secretion.

Ordering Information

Catalog Number
X1630M

Size
100 µg

Form
Unconjugated

Host/Clone
Mouse Clone 5G10

Formulation
Provided as solution in phosphate buffered saline with 0.08% sodium azide

Concentration
See vial for concentration

Isotype
IgG1

Applications
Western Blot, Immunohistochemistry

Species Reactivity
Rat, Mouse

Accession Number

Human	P19328

Immunogen

Antibody raised to synthetic peptide internal sequence corresponding to the third intracellular loop of rat alpha 2b adrenergic receptor.

Western blot analysis using alpha2B adrenergic receptor antibody on MDCK cells transfected to produce alpha2B receptor protein.

For research use only. Not for use in human diagnostics or therapeutics.

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Positive Control/Tissue Expression

MDCK cells transfected with rat alpha2B adrenergic receptors.

Comments

Antibody detects alpha2B Adrenergic Receptors (1-5 μg/ml) and immunohistochemistry. Optimal concentration should be evaluated by serial dilutions.

Purification

Protein A/G Chromatography

Ship Conditions

Ship at ambient temperature, freeze upon arrival

Storage Customer

Product should be stored at -20ºC. Aliquot to avoid freeze/thaw cycles

Stability

Products are stable for one year from purchase when stored properly

References

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2. Yun, J., et al. 'Gene expression profile of neurodegeneration induced by alpha1B-adrenergic receptor overactivity: NMDA/GABAA dysregulation and apoptosis.' Brain 2003, Pt 12, 2667-81
3. Peterhoff, M., et al. 'Inhibition of insulin secretion via distinct signaling pathways in alpha2-adrenoceptor knockout mice.' Eur J Endocrinol 2003, 4, 343-50
4. Paris, A., et al. 'Activation of alpha 2B-adrenoceptors mediates the cardiovascular effects of etomidate.' Anesthesiology 2003, 99, 4, 889-95
5. Brady, AE, et al. 'Spinophilin stabilizes cell surface expression of alpha 2B-adrenergic receptors.' J Biol Chem 2003, 278, 34, 32405-12
6. Savola, JM, et al. 'Fipamezole (JP-1730) is a potent alpha2 adrenergic receptor antagonist that reduces levodopa-induced dyskinesia in the MPTP-lesioned primate model of Parkinson's disease.' Mov Disord 2003, 8, 872-83
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8. Ge, H, et al. 'Constitutive precoupling to G(i) and increased agonist potency in the alpha(2B)-adrenoceptor.' Biochem Biophys Res Commun 2003, 306, 4, 959-65
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10. Feldman J, Bousquet P. 'Role of cental alpha2B-adrenergic receptors in blood pressure control and hypertension.' J Hypertens 2003, 5, 871-2
11. Willems EW, et al. 'Possible role of alpha-adrenoceptor subtypes in acute migraine therapy.' Cephalalgia 2003, 4, 245-57

Product Specific References