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Anti-Alpha-2A Adrenergic Receptor Antibody

Catalog # AP60214

Product Information

Application	WB, IF/IC
Primary Accession	P08913
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	50647

Additional Information

Gene ID	150
Other Names	ADRA2R; ADRAR; Alpha-2A adrenergic receptor; Alpha-2 adrenergic receptor subtype C10; Alpha-2A adrenoreceptor; Alpha-2A adrenoceptor; Alpha-2AAR
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Alpha-2A Adrenergic Receptor. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IF/IC (1/100 - 1/500), IP (1/10 - 1/100) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

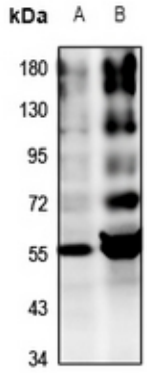
Protein Information

Name	ADRA2A (HGNC:281)
Synonyms	ADRA2R, ADRAR
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:2170371, PubMed:23105096, PubMed:2568356, PubMed:35245122, PubMed:27376152). Control a variety of physiological processes, such as regulation of blood pressure, lipolysis and insulin release (PubMed:2568356, PubMed:27376152). 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 agonists of ADRA2A is

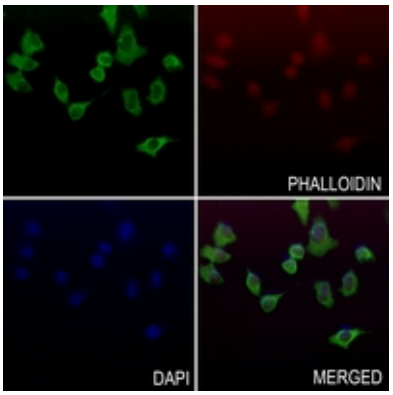
oxymetazoline > clonidine > epinephrine > norepinephrine > phenylephrine > dopamine > p-synephrine > p-tyramine > serotonin = p-octopamine. For antagonists, the rank order is yohimbine > phentolamine = mianserine > chlorpromazine = spiperone = prazosin > propanolol > alprenolol = pindolol (PubMed:2170371, PubMed:2568356).

Cellular Location Cell membrane; Multi-pass membrane protein

Images



Western blot analysis of Alpha-2A Adrenergic Receptor expression in Hela (A), A2780 (B) whole cell lysates. (Predicted band size: 50 kD; Observed band size: 55 kD)



Immunofluorescent analysis of Alpha-2A Adrenergic Receptor staining in SGC7901 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.