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# AR α2A Polyclonal Antibody

Catalog # AP68481

## Product Information

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|---|---|
| **Application** | WB, IHC-P, IF, ICC, E |
| **Primary Accession** | P08913 |
| **Reactivity** | Human, Mouse, Rat |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 50647 |

## Additional Information

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|---|---|
| **Gene ID** | 150 |
| **Other Names** | ADRA2A; ADRA2R; ADRAR; Alpha-2A adrenergic receptor; Alpha-2 adrenergic receptor subtype C10; Alpha-2A adrenoreceptor; Alpha-2A adrenoceptor; Alpha-2AAR |
| **Dilution** | WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications. IHC-P~~N/A IF~~1:50~200 ICC~~N/A E~~N/A |
| **Format** | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide. |
| **Storage Conditions** | -20℃ |

## Protein Information

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|---|---|
| **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 > |

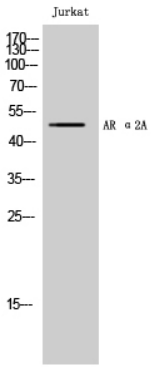
dopamine > p-synephrine > p-tyramine > serotonin = p-octopamine. For antagonists, the rank order is yohimbine > phentolamine = mianserine > chlorpromazine = spiperone = prazosin > propanolol > alprenolol = pindolol (PubMed:2170371, PubMed:2568356).

**Cellular Location** Cell membrane; Multi-pass membrane protein

## Background

Alpha-2 adrenergic receptors mediate the catecholamine- induced inhibition of adenylate cyclase through the action of G proteins. The rank order of potency for agonists of this receptor 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.

## Images




Western Blot analysis of Jurkat cells using AR α2A Polyclonal Antibody

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