

## Product datasheet for **AP20407PU-N**

### alpha 2a Adrenergic Receptor (ADRA2A) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	<b>Western blot:</b> 1/500-1/1000. <b>Immunofluorescence:</b> 1/50-1/200. <b>Immunohistochemistry on Paraffin Sections:</b> 1/50-1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Specificity:	This antibody detects endogenous levels of AR alpha-2A protein. (region surrounding Arg361)
Formulation:	Phosphate buffered saline (PBS), pH~7.2 State: Aff - Purified State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE). Preservative: 0.05% Sodium Azide
Concentration:	1.0 mg/ml
Purification:	Affinity Chromatography using epitope-specific immunogen.
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~48 kDa
Gene Name:	adrenoceptor alpha 2A
Database Link:	<a href="#">Entrez Gene 11551 Mouse</a> <a href="#">Entrez Gene 25083 Rat</a> <a href="#">Entrez Gene 150 Human P08913</a>



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**Background:**

This study investigates the involvement of alpha2-adrenergic receptors (AR) in mouse brain induced by a low dose of methamphetamine (METH, 2 mg/kg). Immunohistochemical studies show that alpha2A-AR increased in the dentate gyrus area of the hippocampus 24 h after five repeated administrations of METH. The hippocampal alpha2A-AR proteins rose 3.2-fold when compared to the saline-administered mice. The other adrenergic receptor, alpha1D-AR, were not changed by the treatment. Moreover, alpha subunits of GTP-binding proteins (G $\alpha$ ), one of the downstream molecules of alpha2A-AR, was also increased by the treatment. These suggest that the repeated administration of low-doses of METH causes quantitative changes of the signaling of alpha2A-AR in the mouse hippocampus.

**Synonyms:**

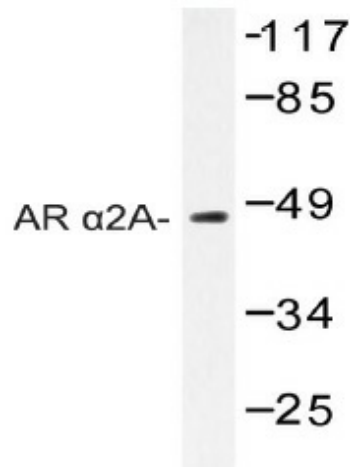
ADRA2A, ADRA2R, ADRAR, Alpha-2A adrenoceptor, Alpha-2A adrenoceptor

**Protein Families:**

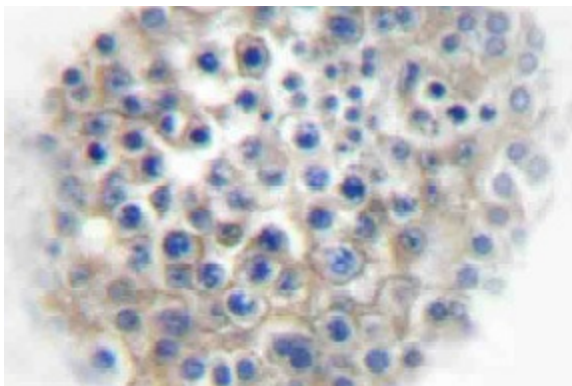
Druggable Genome, GPCR, Transmembrane

**Protein Pathways:**

Neuroactive ligand-receptor interaction

**Product images:**

Western blot (WB) analysis of AR alpha2A antibody (Cat.-No.: AP20407PU-N) in extracts from Jurkat cells.



Immunohistochemistry (IHC) analyzes of AR alpha2A antibody (Cat.-No.: AP20407PU-N) in paraffin-embedded human testis tissue.