

## Basic Information

Product Name	Anti-ADRA2A Antibody	
Gene Name	ADRA2A	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, FCM, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human alpha 2a Adrenergic Receptor/ADRA2A recombinant protein (Position: M16-V465).	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	51 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Flow Cytometry (Fixed):	1:50-200
	Enzyme linked immunosorbent assay (ELISA):	1:100-1000

## Storage

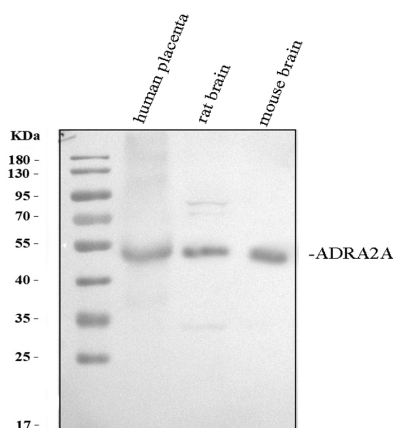
12 months from date of receipt, -20°C as supplied.

## Background Information

The alpha-2A adrenergic receptor, also known as ADRA2A denotes the human gene encoding it. This gene is mapped to 10q25.2. Alpha-2-adrenergic receptors are members of the G protein-coupled receptor superfamily. They include 3 highly homologous subtypes: alpha2A, alpha2B, and alpha2C. These receptors have a critical role in regulating neurotransmitter release from sympathetic nerves and from adrenergic neurons in the central nervous system. Studies in mouse revealed that both the alpha2A and alpha2C subtypes were required for normal presynaptic control of transmitter release from sympathetic nerves in the heart and from central noradrenergic neurons; the alpha2A subtype inhibited transmitter release at high stimulation frequencies, whereas the alpha2C subtype modulated neurotransmission at lower levels of nerve activity. This gene encodes alpha2A subtype and it contains no introns in either its coding or untranslated sequences. Alpha-2 adrenergic receptors mediate the catecholamine-induced inhibition

of adenylate cyclase through the action of G proteins.

## Selected Validation Data



Western blot analysis of ADRA2A using anti-ADRA2A antibody (A00883-3). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

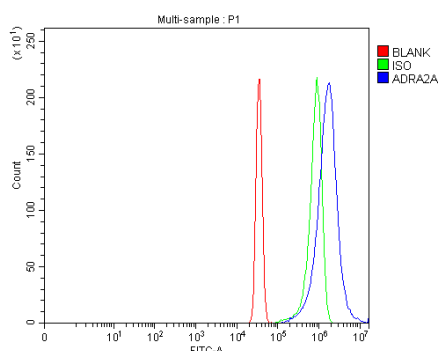
Lane 1: human placenta tissue lysates,

Lane 2: rat brain tissue lysates,

Lane 3: mouse brain tissue lysates

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-ADRA2A antigen A03957-Aen affinity purified polyclonal antibody (A00883-3) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for ADRA2A at approximately 51 kDa. The expected band size for ADRA2A is at 51 kDa.



Flow Cytometry analysis of HeLa cells using anti-ADRA2A antibody (A00883-3).

Overlay histogram showing HeLa cells stained with A00883-3 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-ADRA2A Antibody (A00883-3) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

Product datasheet

## Anti-ADRA2A Antibody

Catalog Number: **A00883-3**



antibody and ELISA experts

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Building C21, 3rd to 5th Floors, Optics Valley Biopharmaceutical Accelerator,  
East Lake High-Tech Development Zone, Wuhan.

**Web:** [www.boster.com](http://www.boster.com) **Phone:** 027-67845390/1/2 **Email:** [boster@boster.com](mailto:boster@boster.com)