

## Basic Information

<b>Product Name</b>	Anti-ADRA2A Antibody
<b>Gene Name</b>	ADRA2A
<b>Source</b>	Rabbit
<b>Isotype</b>	IgG
<b>Species Reactivity</b>	human, mouse, rat
<b>Tested Application</b>	WB, FCM, ELISA
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg BSA and 50% glycerol.
<b>Immunogen</b>	E.coli-derived human alpha 2a Adrenergic Receptor/ADRA2A recombinant protein (Position: M16-V465).
<b>concentration</b>	500 ug/ml
<b>Purification</b>	Immunogen affinity purified.
<b>Observed MW</b>	55KD
<b>Dilution Ratios</b>	Western blot (WB): 1:500-2000 Flow cytometry (FCM): 1-3 $\mu$ g/1x10 <sup>6</sup> cells ELISA: 1:100-1000

## Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

## 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

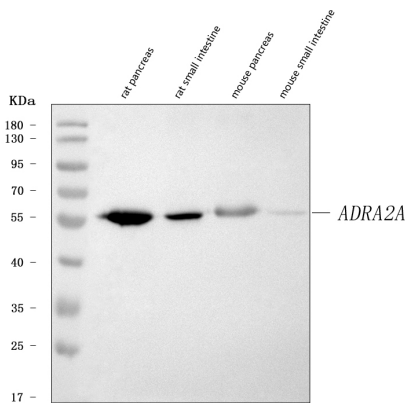


Figure 1. Western blot analysis of anti- ADRA2A antibody (A00883-3). The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: rat pancreas tissue lysates,

Lane 2: rat small intestine tissue lysates,

Lane 3: mouse pancreas tissue lysates,

Lane 4: mouse small intestine tissue lysate.

Use rabbit anti- ADRA2A 1:1000, probed with a goat anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002). A specific band was detected for ADRA2A at approximately 55KD. The expected band size for ADRA2A is at 49KD.