SunLong Biotech Co.,LTD
Tel: 0086-571- 56623320 Fax:0086-571- 56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

Rabbit Anti-ADRA1A antibody

SL0600R

Product Name:	ADRA1A
Chinese Name:	alpha 1肾上腺素能受体A抗体
Alias:	ADA1A_HUMAN; Adrenergic alpha 1A receptor; Adrenergic alpha 1C receptor; Adrenergic alpha 1D receptor; alpha 1 Adrenergic Receptor; Alpha 1A adrenergic receptor; Alpha-1A adrenergic receptor; Alpha-1A adrenoreceptor; Alpha-1C adrenergic receptor; Alpha-adrenergic receptor 1c; ADRA1A; ADRA1C; Alpha 1A adrenoceptor; alpha-1A adrenergic receptor isoform 1; adrenergic, alpha-1A-, receptor variant 1; adrenergic, alpha-1A-, receptor variant 3; adrenergic, alpha-1A-, receptor variant 5; adrenergic, alpha-1A-, receptor variant 8; G protein coupled receptor; alpha-1A adrenoceptor; ADRA1L1; ALPHA1AAR.
文献引用 PubMed :	**Specific References(3)**|SL0600R has been referenced in 3 publications. **[IF=2.59]**Sun, Tao, et al. "Antihypertensive effect of formononetin through regulating the expressions of eNOS, 5-HT< sub> 2A/1B receptors and α< sub> 1-adrenoceptors in spontaneously hypertensive rat arteries." European Journal of Pharmacology (2013).**Rat**. PubMed:23123056 **[IF=7.84]**Chen, Li-You, et al. "Early-life sleep deprivation persistently depresses melatonin production and bio-energetics of the pineal gland: potential implications for the development of metabolic deficiency." Brain Structure and Function (2014): 1-14.**WB;Rat**. PubMed:24515890 **[IF=4.37]**Wang, Wenjuan, et al. "Effects of Estradiol Valerate and Remifemin on Norepinephrine Signaling in the Brain of Ovariectomized Rats."Neuroendocrinology 101.2 (2015): 120-132.**IHC-F;Rat**. PubMed:25613345

Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Rabbit,Sheep,Guinea Pig,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1μg /testIF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	51kDa
Cellular localization:	The nucleusThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Alpha-1A adrenergic receptor:201-300/466
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Alpha-1-adrenergic receptors (alpha-1-ARs) are members of the G protein-coupled receptor superfamily. They activate mitogenic responses and regulate growth and proliferation of many cells. There are 3 alpha-1-AR subtypes: alpha-1A, -1B and -1D, all of which signal through the Gq/11 family of G-proteins and different subtypes show different patterns of activation. This gene encodes alpha-1A-adrenergic receptor. Alternative splicing of this gene generates four transcript variants, which encode four different isoforms with distinct C-termini but having similar ligand binding properties. [provided by RefSeq, Jul 2008]. **Function:** This alpha-adrenergic receptor mediates its action by association with G proteins that activate a phosphatidylinositol-calcium second messenger system. Its effect is mediated by G(q) and G(11) proteins. Nuclear ADRA1A-ADRA1B heterooligomers regulate phenylephrine(PE)-stimulated ERK signaling in cardiac myocytes. **Subunit:** Homo- and heterooligomer. Heterooligomerizes with ADRA1B homooligomers in cardiac myocytes. **Subcellular Location:** Nucleus membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein. Note=Location at the nuclear membrane facilitates heterooligomerization and regulates ERK-mediated signaling in cardiac myocytes. Colocalizes with GNAQ, PLCB1 as well as LAP2 at the nuclear membrane of cardiac

myocytes.

Tissue Specificity:
Expressed in heart, brain, liver and prostate, but not in kidney, lung, adrenal, aorta and pituitary. Within the prostate, expressed in the apex, base, periurethral and lateral lobe. Isoform 4 is the most abundant isoform expressed in the prostate with high levels also detected in liver and heart.

Post-translational modifications:
C-terminal Ser or Thr residues may be phosphorylated.

Similarity:
Belongs to the G-protein coupled receptor 1 family. Adrenergic receptor subfamily. ADRA1A sub-subfamily.

SWISS:
P35348

Gene ID:
148

Database links:

Entrez Gene: 148 Human

Entrez Gene: 11549 Mouse

Entrez Gene: 29412 Rat

Omim: 104221 Human

SwissProt: P35348 Human

SwissProt: P97718 Mouse

SwissProt: P43140 Rat

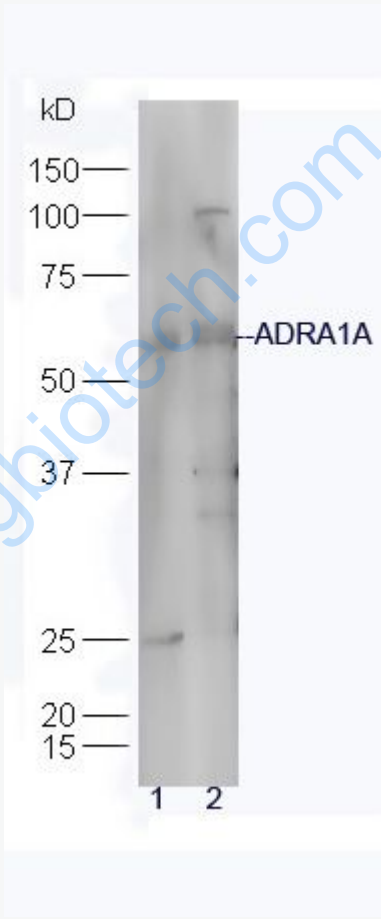
Unigene: 52931 Human

Unigene: 709175 Human

Unigene: 57064 Mouse

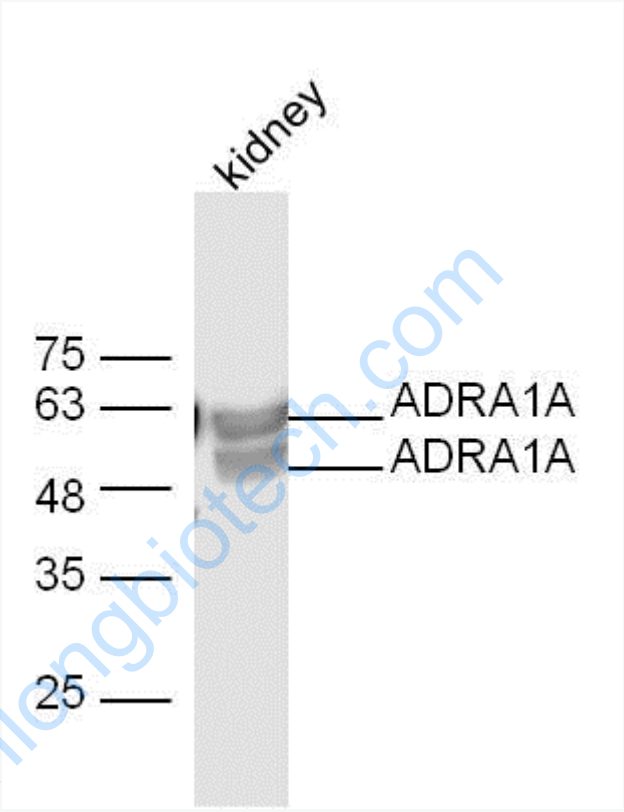
Unigene: 9991 Rat

Important Note:

	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. ADRA1肾上腺素能α1受体位于突触后，在血管平滑肌上，兴奋时可使血管收缩; alpha 1-adrenergic receptor有兴奋效应也有抑制效应。肾上腺素能受体又可分为α和β两种。alpha受体与儿茶酚胺结合后，主要是兴奋平滑肌，如血管收缩、子宫收缩和瞳孔开张肌收缩等；但也有抑制作用，如使小肠平滑肌舒张。β受体又可分为β1和β2两个亚型.
Picture:	 Sample: U937 Cell (Human) Lysate at 30 ug Raji Cell (Human) Lysate at 30 ug Primary: Anti-ADRA1A (SL0600R) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 51 kD

Observed band size: 55 kD



Sample:

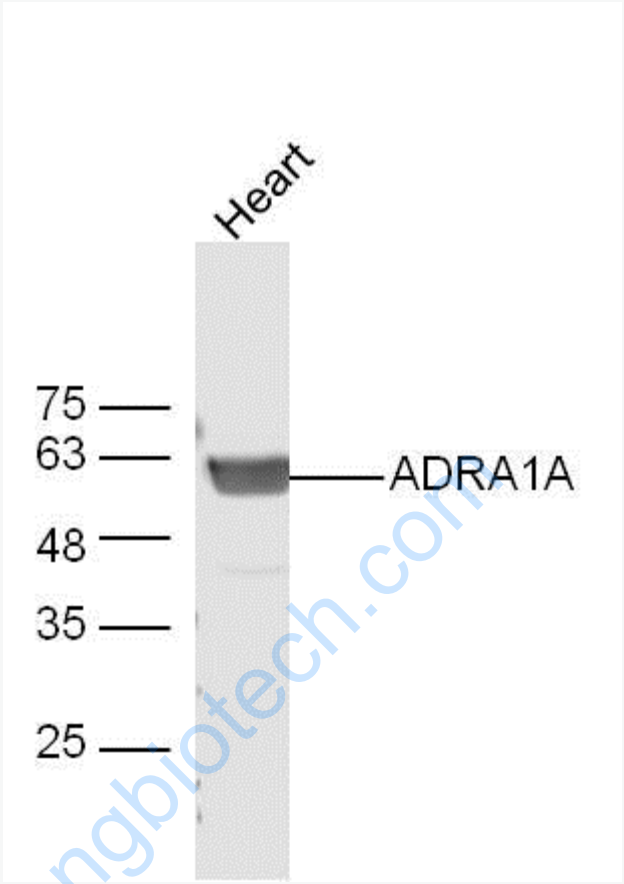
kidney (Mouse) Lysate at 40 ug

Primary: Anti-ADRA1A (SL0600R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 51 kD

Observed band size: 62 kD



Sample:

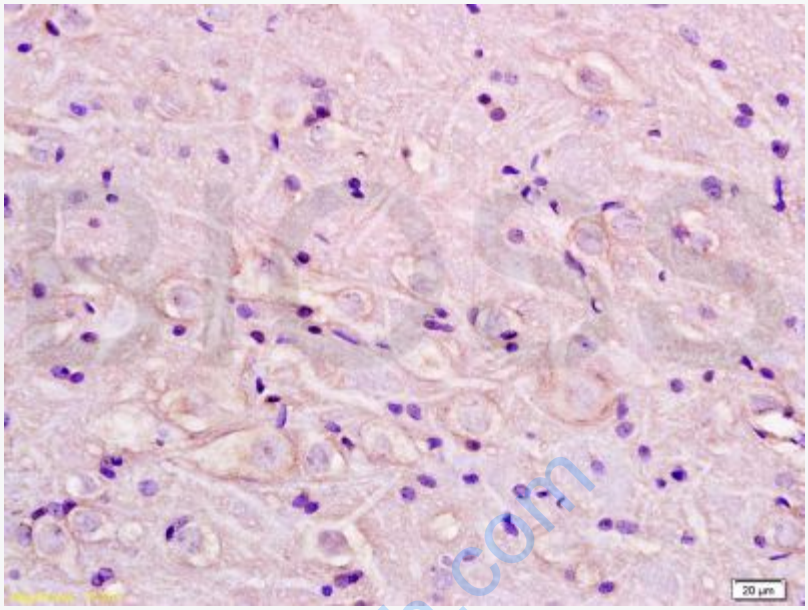
Heart (Mouse) Lysate at 40 ug

Primary: Anti-ADRA1A (SL0600R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

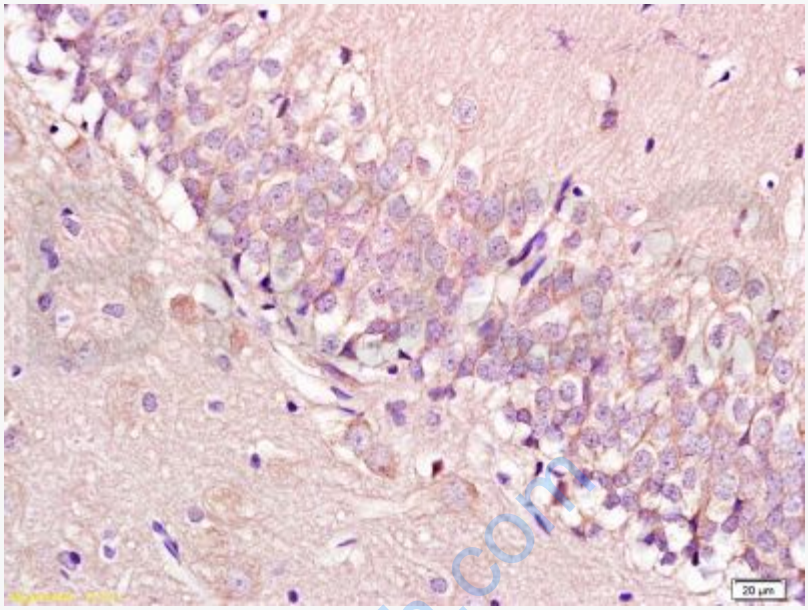
Predicted band size: 51 kD

Observed band size: 62 kD



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;

Incubation: Anti-ADRA1/ADRA1B/alpha 1 Adrenergic Receptor Polyclonal Antibody, Unconjugated (SL0600R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



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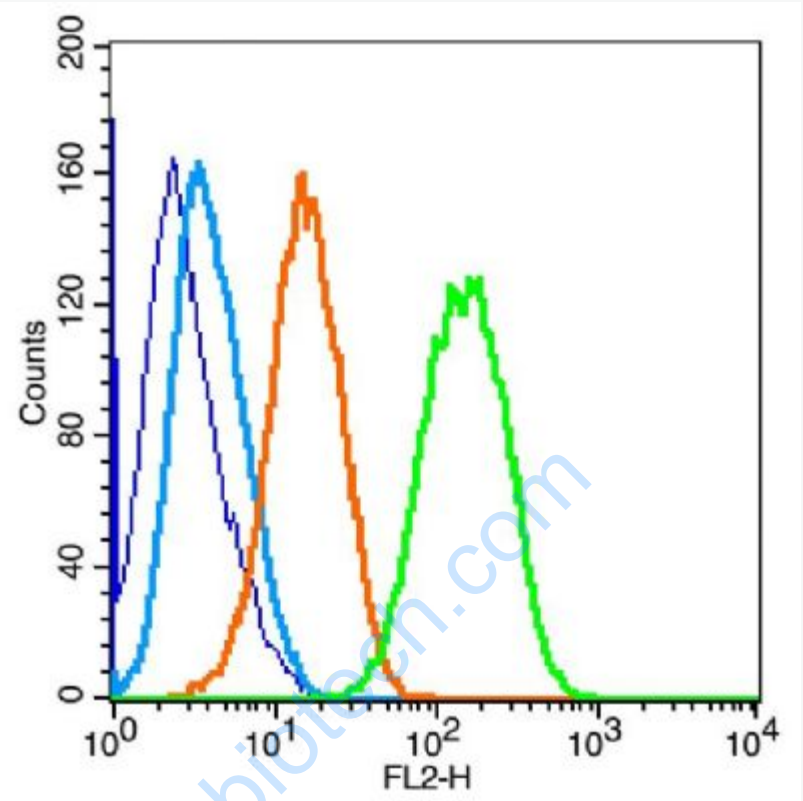

Blank control: U-87MG(blue).

Primary Antibody:Rabbit Anti-ADRA1A antibody(SL0600R), Dilution: 1μg in 100 μL 1X PBS containing 0.5% BSA;

Isotype Control Antibody: Rabbit IgG(orange) ,used under the same conditions);

Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA.

Protocol

The cells were fixed with 2% paraformaldehyde (10 min) , then permeabilized with 90% ice-cold methanol for 30 min on ice. Primary antibody (SL0600R) were incubated for 30 min on the ice, followed by 1 X PBS containing 0.5% BSA + 1 0% goat serum (15 min) to block non-specific protein-protein interactions. Then the Goat Anti-rabbit IgG/PE antibody was added into the blocking buffer mentioned above to

	react with the primary antibody at 1/200 dilution for 30 min on ice. Acquisition of 20,000 events was performed.