

**AR- $\alpha$ 1A Polyclonal Antibody**

<b>Catalog No :</b>	YT0354
<b>Reactivity :</b>	Human;Mouse;Rat
<b>Applications :</b>	WB;IF;ELISA
<b>Target :</b>	AR- $\alpha$ 1A
<b>Fields :</b>	>>Calcium signaling pathway;>>cGMP-PKG signaling pathway;>>Neuroactive ligand-receptor interaction;>>AMPK signaling pathway;>>Adrenergic signaling in cardiomyocytes;>>Vascular smooth muscle contraction;>>Salivary secretion
<b>Gene Name :</b>	ADRA1A
<b>Protein Name :</b>	Alpha-1A adrenergic receptor
<b>Human Gene Id :</b>	148
<b>Human Swiss Prot No :</b>	P35348
<b>Mouse Gene Id :</b>	11549
<b>Mouse Swiss Prot No :</b>	P97718
<b>Rat Gene Id :</b>	29412
<b>Rat Swiss Prot No :</b>	P43140
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human ADRA1A. AA range:136-185
<b>Specificity :</b>	AR- $\alpha$ 1A Polyclonal Antibody detects endogenous levels of AR- $\alpha$ 1A protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1:500 - 1:2000. IF 1:200 - 1:1000. ELISA: 1:10000. Not yet tested in other

applications.

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**Purification :** The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

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**Concentration :** 1 mg/ml

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**Storage Stability :** -15°C to -25°C/1 year(Do not lower than -25°C)

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**Observed Band :** 51kD

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**Cell Pathway :** Calcium;Neuroactive ligand-receptor interaction;Vascular smooth muscle contraction;

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**Background :** 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],

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**Function :** 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.,PTM:Carboxyl-terminal Ser or Thr residues may be phosphorylated.,similarity:Belongs to the G-protein coupled receptor 1 family.,tissue specificity:Heart, brain, liver and prostate, but not in kidney, lung, adrenal, aorta and pituitary. Isoform 4 is the most abundant isoform expressed in the prostate with high levels also detected in liver and heart.,

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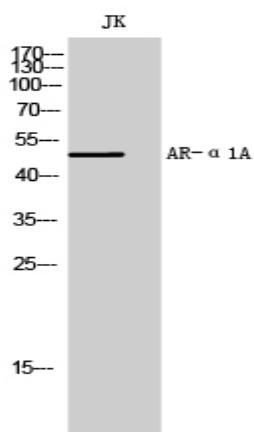
**Subcellular Location :** Nucleus membrane; Multi-pass membrane protein. Cell membrane ; Multi-pass membrane protein . Cytoplasm . Membrane, caveola . Location at the nuclear membrane facilitates heterooligomerization and regulates ERK-mediated signaling in cardiac myocytes. Colocalizes with GNAQ, PLCB1 as well as LAP2 at the nuclear membrane of cardiac myocytes.

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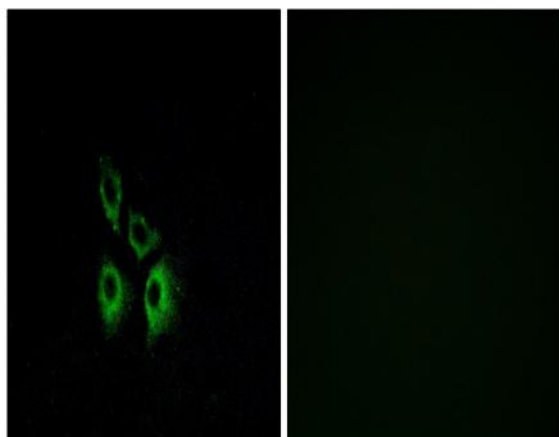
**Expression :** Expressed in heart, brain, liver and prostate, but not in kidney, lung, adrenal, aorta and pituitary. Within the prostate, expressed in the apex, base, periurethral and lateral lobe. Isoform 4 is the most abundant isoform expressed in the prostate with high levels also detected in liver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

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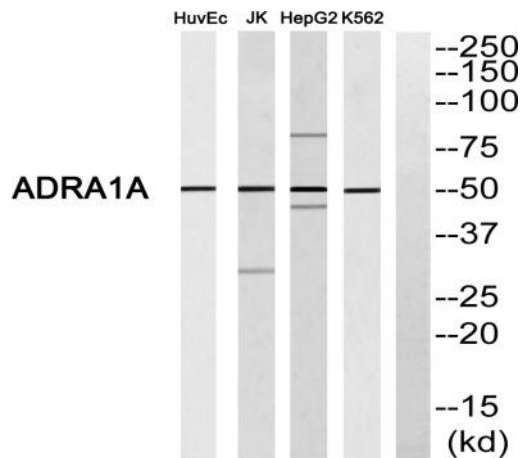
**Products Images**



Western Blot analysis of JK cells using AR- $\alpha$ 1A Polyclonal Antibody



Immunofluorescence analysis of A549 cells, using ADRA1A Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of ADRA1A Antibody. The lane on the right is blocked with the ADRA1A peptide.