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Anti-Beta-1 Adrenergic Receptor Antibody

Catalog # AP60740

Product Information

Application	WB, IHC, IF/IC
Primary Accession	P08588
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	51224

Additional Information

Gene ID	153
Other Names	ADRB1R; B1AR; Beta-1 adrenergic receptor; Beta-1 adrenoreceptor; Beta-1 adrenoceptor
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Beta-1 Adrenergic Receptor. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IHC (1/100 - 1/200), IF/IC (1/100 - 1/500) IHC~~WB (1/500 - 1/1000), IHC (1/100 - 1/200), IF/IC (1/100 - 1/500) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

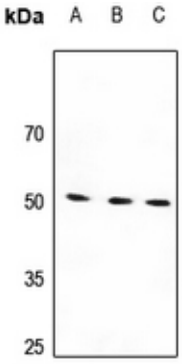
Protein Information

Name	ADRB1 (HGNC:285)
Synonyms	ADRB1R, B1AR
Function	G protein-coupled receptor for catecholamines that couples to G(s) proteins to activate adenylate cyclase and cAMP-dependent pathway (PubMed:10212248, PubMed:12391161, PubMed:15358775). Binds epinephrine and norepinephrine with approximately equal affinity (PubMed:33093660). Mediates the activation of Ras via binding with cAMP-dependent RAPGEF2 (PubMed:12391161). As part of the sympathetic nervous system, plays a role in the physiologic regulation of cardiac functions such as stimulation of cardiomyocyte contraction (PubMed:11052857). Also delivers proapoptotic signals in cardiomyocytes (By similarity). Involved in the regulation of sleep/wake behaviors (PubMed:11854867, PubMed:31473062).

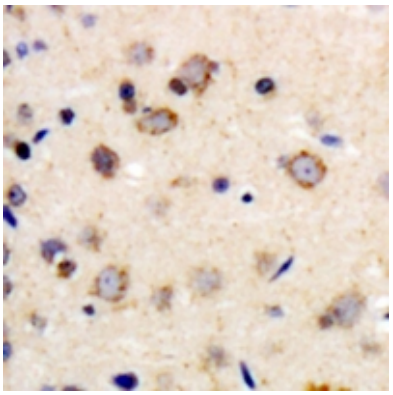
Cellular Location

Cell membrane {ECO:0000250|UniProtKB:P18090}; Multi-pass membrane protein Note=Colocalizes with RAPGEF2 at the plasma membrane (By similarity) Localized at the plasma membrane (By similarity). Found in the Golgi upon GOPC overexpression (PubMed:15358775). Localized to early endosomes during endocytic trafficking (PubMed:21540189) {ECO:0000250|UniProtKB:P18090, ECO:0000269|PubMed:15358775, ECO:0000269|PubMed:21540189}

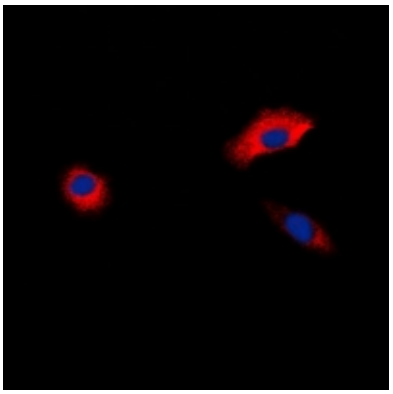
Images



Western blot analysis of Beta-1 Adrenergic Receptor expression in mouse heart (A), rat heart (B), rat kidney (C) whole cell lysates. (Predicted band size: 51 kD; Observed band size: 51 kD)

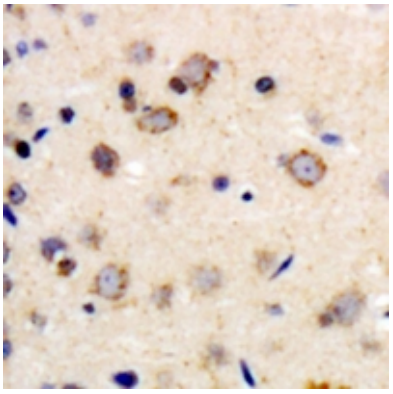


Immunohistochemical analysis of Beta-1 Adrenergic Receptor staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of Beta-1 Adrenergic Receptor staining in HepG2 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

Immunohistochemical analysis of Beta-1 Adrenergic Receptor staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



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