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ADRB2 Antibody (S364)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7263E

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P07550
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB16260
Calculated MW	46459
Antigen Region	345-373

Additional Information

Gene ID	154
Other Names	Beta-2 adrenergic receptor, Beta-2 adrenoreceptor, Beta-2 adrenoceptor, ADRB2, ADRB2R, B2AR
Target/Specificity	This ADRB2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 345-373 amino acids from human ADRB2.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	ADRB2 Antibody (S364) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ADRB2
Synonyms	ADRB2R, B2AR
Function	Beta-adrenergic receptors mediate the catecholamine-induced activation of

adenylate cyclase through the action of G proteins. The beta-2-adrenergic receptor binds epinephrine with an approximately 30- fold greater affinity than it does norepinephrine.

Cellular Location

Cell membrane; Multi-pass membrane protein. Early endosome. Golgi apparatus. Note=Colocalizes with VHL at the cell membrane (PubMed:19584355). Activated receptors are internalized into endosomes prior to their degradation in lysosomes (PubMed:20559325) Activated receptors are also detected within the Golgi apparatus (PubMed:27481942).

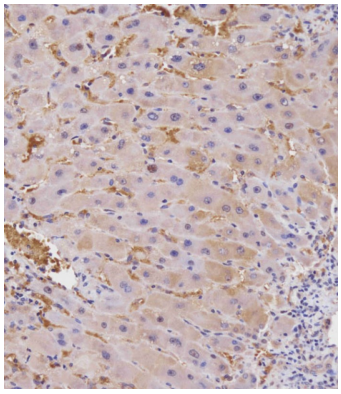
Background

ADRB2, beta-2-adrenergic receptor which is a member of the G protein-coupled receptor superfamily. This receptor is directly associated with one of its ultimate effectors, the class C L-type calcium channel Ca(V)1.2. This receptor-channel complex also contains a G protein, an adenylyl cyclase, cAMP-dependent kinase, and the counterbalancing phosphatase, PP2A. The assembly of the signaling complex provides a mechanism that ensures specific and rapid signaling by this G protein-coupled receptor. This protein is intronless.

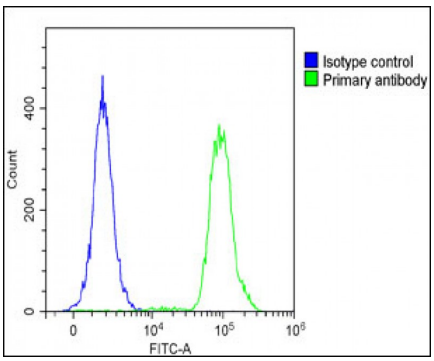
References

Kobilka B.K., Dixon R.A.F.Proc. Natl. Acad. Sci. U.S.A. 84:46-50(1987)
Emorine L.J., Marullo S.Proc. Natl. Acad. Sci. U.S.A. 84:6995-6999(1987)
Kobilka B.K., Frielle T.J. Biol. Chem. 262:7321-7327(1987)

Images

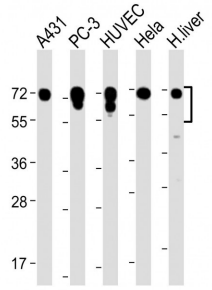


Immunohistochemical analysis of AP7263E on paraffin-embedded Human hepato carcinoma tissue. Tissue was fixed with formaldehyde at room temperature. Heat induced epitope retrieval was performed by EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:100) for 1 hour at room temperature. Undiluted CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



Overlay histogram showing A431 cells stained with AP7263E(green line). The cells were fixed with 2% paraformaldehyde and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed at 1/200 dilution for 40 min at Room temperature. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

All lanes : Anti-ADRB2 Antibody (S364) at 1:2000 dilution Lane 1: A431 whole cell lysate Lane 2: PC-3 whole cell lysate Lane 3: HUVEC whole cell lysate Lane 4: Hela whole cell lysate Lane 5: Human liver lysate Lysates/proteins at



20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 46 kDa Blocking/Dilution buffer: 5% NFDM/TBST.