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Anti-Beta-2 Adrenergic Receptor (pS355/S356) Antibody

Rabbit polyclonal antibody to Beta-2 Adrenergic Receptor (pS355/S356)
Catalog # AP61150

Product Information

Application	WB, IHC
Primary Accession	P07550
Other Accession	P18762
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	46459

Additional Information

Gene ID	154
Other Names	ADRB2R; B2AR; Beta-2 adrenergic receptor; Beta-2 adrenoreceptor; Beta-2 adrenoceptor
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human Beta-2 Adrenergic Receptor (pS355/S356). The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IHC (1/50 - 1/200) IHC~~WB (1/500 - 1/1000), IHC (1/50 - 1/200)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	ADRB2 (HGNC:286)
Synonyms	ADRB2R, B2AR
Function	G protein-coupled receptor for catecholamines that couples to both G(s) and G(i) proteins, activating bifurcated signaling pathways (PubMed:2831218, PubMed:7915137). ADRB2 binds epinephrine (Epi) with an approximately 30-fold greater affinity than norepinephrine (NE) (PubMed:2831218, PubMed:33093660, PubMed:7915137). In the heart, Epi- and NE-activated ADRB2 induces rapid and slow cardiomyocyte contraction rate, respectively (By similarity). Both NE and Epi promote coupling to G(s)/PKA pathway to regulate myocyte contraction rate (By similarity). Epi also promotes ADRB2 coupling to G(i) proteins to exert cardioprotective effects especially in the

conditions of hypoxia and oxidative stress through the G(i)/PI3K/Akt signaling pathway (By similarity). ADRB2-G(s) signaling delivers proapoptotic signals in cardiomyocytes although G(i)-mediated survival effect appears to predominate (By similarity). ADRB2 also transduces signals independently of PKA to regulate cellular pH by modulating Na(+)/H(+) exchanger SLC9A3 function (PubMed:9560162).

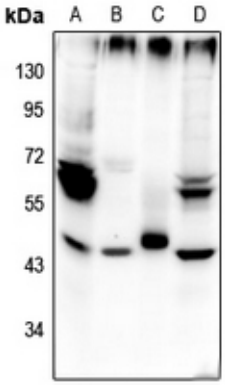
Cellular Location

Cell membrane; Multi-pass membrane protein. 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).

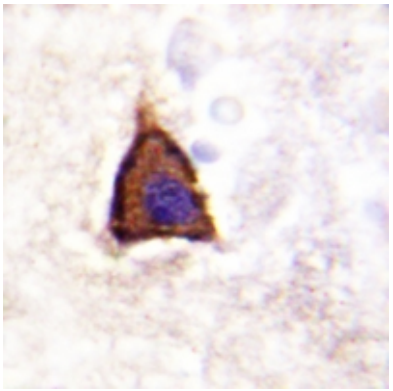
Background

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human Beta-2 Adrenergic Receptor (pS355/S356). The exact sequence is proprietary.

Images



Western blot analysis of Beta-2 Adrenergic Receptor (pS355/S356) expression in Hela (A), rat prostate (B), mouse lung (C), EC9706 (D) whole cell lysates.



Immunohistochemical analysis of Beta-2 Adrenergic Receptor (pS355/S356) 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.