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Polyclonal Antibody to Adrenergic Receptor Beta 2 (ADRb2)

Adrenergic Receptor Beta 2
Catalog # AP74799

Product Information

Application	IHC
Primary Accession	P10608
Reactivity	Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	46891

Additional Information

Other Names	B2AR; Beta-2 adrenoreceptor
Target/Specificity	Rattus norvegicus (Rat)
Dilution	IHC~~Western blotting: 0.5-2 □g/mL;1:160-600 Immunohistochemistry: 5-20 □g/mL;1:16-60 Immunocytochemistry: 5-20 □g/mL;1:16-60 Optimal working dilutions must be determined by end user.
Format	0.01M PBS, pH7.4, containing 0.05% Proclin-300, 50% glycerol.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

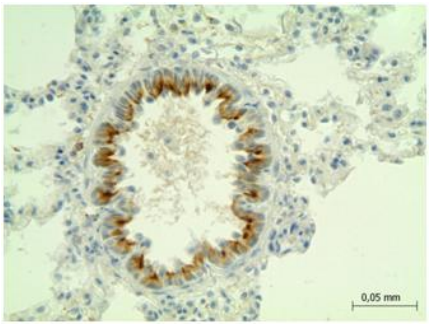
Name	Adrb2
Synonyms	Adrb2r
Function	G protein-coupled receptor for catecholamines that couples to both G(s) and G(i) proteins, activating bifurcated signaling pathways. ADRB2 binds epinephrine (Epi) with an approximately 30-fold greater affinity than norepinephrine (NE) (By similarity). In the heart, Epi- and NE-activated ADRB2 induces rapid and slow cardiomyocyte contraction rate, respectively. Both NE and Epi promote coupling to G(s)/PKA pathway to regulate myocyte contraction rate. 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. 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 (By similarity).

Cellular Location

Cell membrane {ECO:0000250|UniProtKB:P07550}; Multi-pass membrane protein {ECO:0000250|UniProtKB:P07550}. Early endosome {ECO:0000250|UniProtKB:P07550}. Golgi apparatus {ECO:0000250|UniProtKB:P07550}. Note=Colocalizes with VHL at the cell membrane. Activated receptors are internalized into endosomes prior to their degradation in lysosomes. Activated receptors are also detected within the Golgi apparatus. {ECO:0000250|UniProtKB:P07550}

Images



DAB staining on IHC-P; Samples: Rat Bronchus Tissue; Primary Ab: 3 µg/ml Rabbit Anti-Rat ADRb2 Antibody Second Ab: 2 µg/mL HRP-Linked Caprine Anti-Rabbit IgG Polyclonal Antibody (Catalog: SAA544Rb19)