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ADRB3 Antibody (C-Term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21828b

Product Information

Application	WB, E
Primary Accession	P13945
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Canine, Rabbit
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB53334
Calculated MW	43519

Additional Information

Gene ID	155
Other Names	Beta-3 adrenergic receptor, Beta-3 adrenoreceptor, Beta-3 adrenoceptor, ADRB3, ADRB3R, B3AR
Target/Specificity	This ADRB3 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 255-289 amino acids from human ADRB3.
Dilution	WB~~1:2000 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	ADRB3 Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ADRB3 (HGNC:288)
Synonyms	ADRB3R, B3AR
Function	G protein-coupled receptor for catecholamines that couples to both G(s) and G(i) proteins, leading to either activation or inhibition of adenylate cyclase

	and cAMP-dependent pathway, respectively (PubMed:10188996, PubMed:2570461, PubMed:8641219). The rank order of potency for physiological agonists is norepinephrine > epinephrine (PubMed:10188996, PubMed:2570461, PubMed:8641219). Involved in the regulation of thermogenesis and lipolysis in brown and white adipose tissue, after coupling to G(s) proteins and stimulation of the cAMP-PKA axis (By similarity). Also activates lipolytic process by coupling to G(i) proteins and consequent initiation of the ERK1/2 MAP kinase cascade (PubMed:10207024). Participates in relaxation of the blood vessels and the urinary bladder (PubMed:10188996). Also mediates negative inotropic effects in cardiomyocytes through activation of an NO synthase pathway and subsequent increase in cGMP levels, possibly involving G(i/o) protein-mediated coupling (PubMed:9769330).
Cellular Location	Cell membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:O02662}
Tissue Location	Expressed mainly in adipose tissues.

Background

Beta-adrenergic receptors mediate the catecholamine- induced activation of adenylate cyclase through the action of G proteins. Beta-3 is involved in the regulation of lipolysis and thermogenesis.

References

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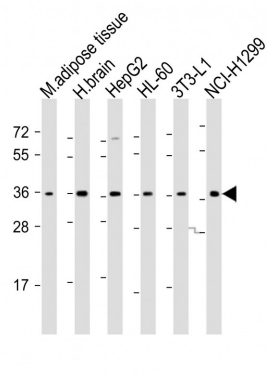
Lelias J.M.,et al.FEBS Lett. 324:127-130(1993).
Kopatz S.A.,et al.Submitted (NOV-2003) to the EMBL/GenBank/DDBJ databases.
Granneman J.G.,et al.Mol. Pharmacol. 42:964-970(1992).

Images



All lanes : Anti-ADRB3 Antibody (C-Term) at 1:2000 dilution Lane 1: mouse adipose tissue lysate Lane 2: human brain lysate Lane 3: HepG2 whole cell lysate Lane 4: HL-60 whole cell lysate Lane 5: 3T3-L1 whole cell lysate Lane 6: NCI-H1299 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 44 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.