10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ADRB3 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21726c

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	RB53477
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 216-249 amino acids from the Central region of human ADRB3.
Dilution	WB~~1:1000 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 (Center) 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.

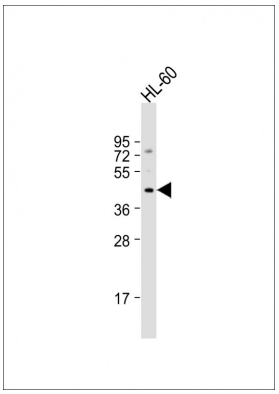
Background

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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van Spronsen A.,et al.Eur. J. Biochem. 213:1117-1124(1993).
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



Anti-ADRB3 Antibody (Center) at 1:1000 dilution + HL-60 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'.