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
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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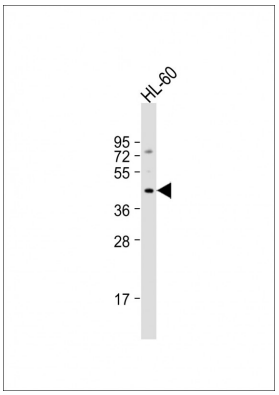
van Spronsen A.,et al.Eur. J. Biochem. 213:1117-1124(1993).
Lelias J.M.,et al.FEBS Lett. 324:127-130(1993).
Kopatz S.A.,et al.Submitted (NOV-2003) to the EMBL/GenBank/DDBJ databases.
Granneman J.G.,et al.Mol. Pharmacol. 42:964-970(1992).

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.