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ADRB3 Rabbit pAb

Catalog # AP98213

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	P13945
Other Accession	P13945
Reactivity	Rat, Human, Mouse
Predicted	Rabbit, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	43519
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human ADRB3
Epitope Specificity	51-150/408
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the G-protein coupled receptor 1 family. Adrenergic receptor subfamily. ADRB3 sub-subfamily.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	beta 3 Adrenergic Receptor is located mainly in adipose tissue and is involved in the regulation of lipolysis and thermogenesis. Beta adrenergic receptors are involved in the epenephrine and norepinephrine-induced activation of adenylate cyclase through the action of G proteins. beta 3 Adrenergic Receptor expression has been documented in adipose tissues, heart, and in smooth muscle of digestive and urinary tract organs (bladder, colon, small intestine, stomach, ureter). Utilization of alternate promoters and/or 3-prime untranslated regions may result in tissue-specific regulation of the expression of this protein.

Additional Information

Gene ID	155
Other Names	BETA3AR; Adrb-3; beta 3-AR; ADRB; ADRB3_HUMAN; ADRB3; Beta-3 adrenoreceptor (Beta-3 adrenoceptor); ADRB3R; B3AR; ADRB3_MOUSE; B3bar; ADRB3_RAT; adrenoceptor beta 3; adrenergic, beta-3-, receptor
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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.

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