

Datasheet for ABIN122007

anti-ADRB3 antibody (Cytoplasmic Domain)



[Go to Product page](#)

1 Image

Overview

Quantity:	50 µg
Target:	ADRB3
Binding Specificity:	Cytoplasmic Domain
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This ADRB3 antibody is un-conjugated
Application:	Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	Synthetic peptide - KLH conjugated
Specificity:	Reacts with Beta-3 Adrenoceptor (Family: GPCR, Subfamily: Adrenergic)
Purification:	Peptide immunogen affinity column

Target Details

Target:	ADRB3
Alternative Name:	beta-3 Adrenergic Receptor (ADRB3 Products)
Background:	The Beta-3 Adrenoceptor (ADRB3) is an Adrenergic Receptor that stimulates lipolysis and increases fatty acids in the blood. Stimulation of the beta-3 adrenoceptor leads to lipolysis in white adipocytes and nonshivering thermogenesis in brown fat. The beta-3 adrenoceptor has also been suggested to affect the physiological control of cardiac and vascular contractility,

Target Details

beta-3 adrenoceptor stimulation decreases cardiac contractility through activation of a nitric oxide synthase pathway. A variant of the beta-3 adrenoceptor, Trp64Arg, has been shown to be associated with weight gain (obesity) and susceptibility to non-insulin-dependent diabetes mellitus (NIDDM), but not with coronary artery disease. Trp64Arg variant receptor has been shown to predict a greater tendency to develop abdominal adiposity and high blood pressure with advancing age. ADRB3 has been suggested to be responsible for the negative inotropic effects of catecholamines and may be involved in pathophysiological mechanisms leading to heart failure, ADRB3 is also one of the molecular targets under active research in the treatment of obesity. Beta-3 adrenoceptor expression has been documented in adipose, 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 ADRB3. ESTs have been isolated from heart/melanocyte/uterus and placenta libraries
Synonyms: ADRB3, ADRB3R, B3AR, Beta-3 adrenoceptor

Gene ID: 155

UniProt: [P13945](#)

Pathways: [cAMP Metabolic Process](#), [Regulation of G-Protein Coupled Receptor Protein Signaling](#), [Feeding Behaviour](#), [Brown Fat Cell Differentiation](#)

Application Details

Application Notes: Immunohistochemistry on formalin fixed paraffin embedded tissues: 36 µg/mL Antigen retrieval: Steam slides in 0.01 M sodium citrate buffer, pH 6.0, at 99-100 °C for 20 min. Remove from heat and let stand at room temperature in buffer for 20 min. Rinse in 1x TBS with Tween (TBST) for 1 min. at room temperature.
Other applications not tested.
Optimal dilutions are dependent on conditions and should be determined by the user. Further Comments: This product was originally produced by MBL International.

Restrictions: For Research Use only

Handling

Concentration: 1 mg/mL

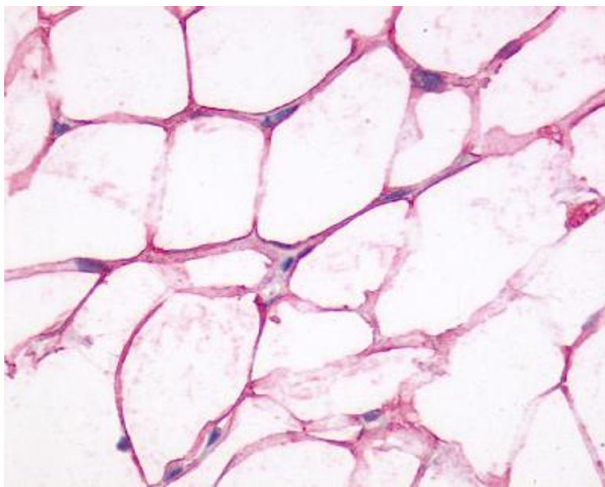
Buffer: PBS, pH 7.7, containing 0.01 % sodium azide

Preservative: Sodium azide

Handling

Precaution of Use:	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C/-80 °C
Storage Comment:	Store the antibody undiluted at 2-8 °C for one month or (in aliquots) at -70 °C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
Expiry Date:	12 months

Images



Immunohistochemistry (Paraffin-embedded Sections)

Image 1. Staining of human adipocytes using SP4071 on paraffin sections