

## Product datasheet for **TA328711**

### Adrb3 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3000
Reactivity:	Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide DAEAQESH*SNPRC, corresponding to amino acid residues 180-192 of mouse $\beta$ 3-Adrenoceptor with replacement of cysteine 186 (C186) with serine (*S). 2nd extracellular loop.
Formulation:	Lyophilized. Concentration before lyophilization ~0.8mg/ml (lot dependent, please refer to CoA along with shipment for actual concentration). Buffer before lyophilization: Phosphate buffered saline (PBS), pH 7.4, 1% BSA, 0.05% NaN3.
Reconstitution Method:	Add 50 ul double distilled water (DDW) to the lyophilized powder.
Purification:	Affinity purified on immobilized antigen.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	adrenergic receptor, beta 3
Database Link:	<a href="#">NP_038490</a> <a href="#">Entrez Gene 25645 Rat</a> <a href="#">Entrez Gene 11556 Mouse</a> <a href="#">P25962</a>



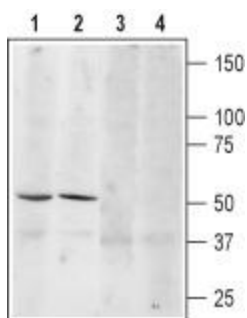
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**Background:**

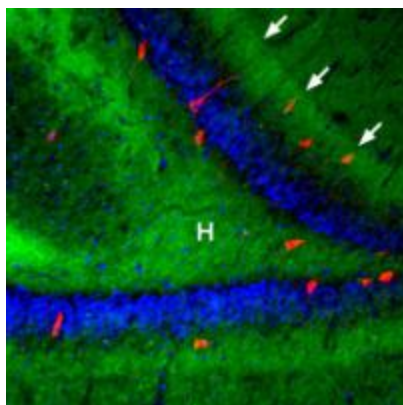
Adrenoceptors (also called Adrenergic receptors) are the receptors for the catecholamines adrenaline and noradrenaline (called epinephrine and norepinephrine in the United States). Adrenaline and noradrenaline play important roles in the control of blood pressure, myocardial contractile rate and force, airway reactivity, and a variety of metabolic and central nervous system functions. The Adrenoceptors are members of the G-protein-coupled receptor (GPCR) superfamily of membrane proteins. They share a common structure of seven putative transmembrane domains, an extracellular amino terminus, and a cytoplasmic carboxyl terminus. The Adrenoceptors are divided into three types:  $\alpha$ 1,  $\alpha$ 2 and  $\beta$ -Adrenoceptors. Each type is further divided into at least three subtypes:  $\alpha$ 1A,  $\alpha$ 1B,  $\alpha$ 1D,  $\alpha$ 2A,  $\alpha$ 2B,  $\alpha$ 2C,  $\beta$ 1,  $\beta$ 2,  $\beta$ 3. The Adrenoceptors are expressed in nearly all peripheral tissues and in the central nervous system. The  $\beta$ 3-Adrenoceptor is insensitive to the commonly used  $\beta$ -antagonists and has often been referred to as the 'atypical'  $\beta$ -Adrenoceptor. Mouse  $\beta$ 3-Adrenoceptor has two known splice variants, isoforms  $\beta$ 3a-Adrenoceptor and  $\beta$ 3b-Adrenoceptor. Both isoforms are expressed in white and brown adipose tissues. The  $\beta$ 3b-Adrenoceptor is highly expressed in brain. The  $\beta$ 3-Adrenoceptor has been found to play a key role in the lipolytic action of catecholamines.

**Synonyms:**

ADRB3R; B3AR; BETA3AR; FLJ99960

**Product images:**


Western blot analysis of mouse brain (lanes 1 and 3) and rat brain (lanes 2 and 4) lysates: 1, 3. Anti- $\beta$ 3-Adrenoceptor (extracellular) antibody, (1:200). 2, 4. Anti- $\beta$ 3-Adrenoceptor (extracellular) antibody, preincubated with the control peptide antigen.



Expression of  $\beta$ 3-Adrenoceptor in rat hippocampus. Immunohistochemical staining of rat hippocampal dentate gyrus using Anti- $\beta$ 3-Adrenoceptor antibody, (1:100), (green).  $\beta$ 3-Adrenoceptor is strongly expressed in the hilus (H) and in the outer molecular layer (arrows). The distribution overlaps the entire layers, but is not restricted to nerve cells (stained red with mouse anti Parvalbumin). DAPI is used as the counterstain (blue).