

#### DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human/Mouse/Rat                                                                                                                                                                                                                                                             |
| <b>Specificity</b>        | Detects human $\beta$ -2 Adrenergic R/ADRB2 in direct ELISAs. Detects human, mouse, and rat $\beta$ -2 Adrenergic R/ADRB2 in Western blots.                                                                                                                                 |
| <b>Source</b>             | Monoclonal Rabbit IgG Clone # 2204C                                                                                                                                                                                                                                         |
| <b>Purification</b>       | Protein A or G purified from cell culture supernatant                                                                                                                                                                                                                       |
| <b>Immunogen</b>          | Synthetic peptide containing human $\beta$ -2 Adrenergic R/ADRB2<br>Accession # P07550                                                                                                                                                                                      |
| <b>Conjugate</b>          | Alexa Fluor 488<br>Excitation Wavelength: 488 nm<br>Emission Wavelength: 515-545 nm                                                                                                                                                                                         |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

#### APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

**Western Blot** Optimal dilution of this antibody should be experimentally determined.

#### PREPARATION AND STORAGE

**Shipping** The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage** Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

#### BACKGROUND

Beta-2 adrenoceptor (ADRB2) is a 413 amino acids adrenergic receptor expressed in smooth muscle and metabolic tissues. Beta-adrenergic receptors belong to the seven-transmembrane domain/GPCR family of receptors and mediate the catecholamine-induced activation of adenylate cyclase through the action of G proteins. Activation of ADRB2 induces a decrease in gastrointestinal motility, bronchodilation, vasodilation in skeletal and cardiac muscle, and glycogenolysis in liver. Agonists of ADRB2 are most widely used for the treatment of asthma. In complex with beta-arrestin-1 and c-src, the beta-2 adrenergic receptor activates MAP kinases ERK1(MAPK3) and ERK2 (MAPK1). Expression of the beta-2 adrenoceptor has been reported in adipose, blood, brain, heart, lung, nose, pancreas, skeletal muscle, skin, and vessel.

#### PRODUCT SPECIFIC NOTICES

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