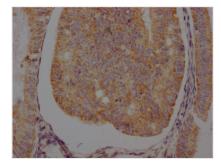




ADRB2 Recombinant Monoclonal Antibody

Product Code	CSB-RA286054A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P07550
Immunogen	A synthesized peptide derived from human beta 2 Adrenergic Receptor
Species Reactivity	Human
Tested Applications	ELISA, IHC; Recommended dilution: IHC:1:50-1:200
Relevance	Beta-adrenergic receptors mediate the catecholamine-induced activation of adenylate cyclase through the action of G proteins. The beta-2-adrenergic receptor binds epinephrine with an approximately 30-fold greater affinity than it does norepinephrine.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Cardiovascular; Signal transduction
Gene Names	ADRB2
Clone No.	4C11

Image

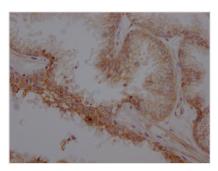


IHC image of CSB-RA286054A0HU diluted at 1:100 and staining in paraffin-embedded human endometrial cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4? overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.









IHC image of CSB-RA286054A0HU diluted at 1:100 and staining in paraffin-embedded human prostate cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4? overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

Description

The ADRB2 recombinant monoclonal antibody is synthesized using recombinant DNA technology and is useful in detecting human ADRB2 protein in ELISA and IHC applications. To produce this antibody, the gene responsible for the ADRB2 monoclonal antibody is first synthesized after sequencing the cDNA of the ADRB2 antibody-producing hybridomas. The hybridomas are created by fusing B cells isolated from the animal that was immunized with a synthesized peptide derived from human ADRB2 with myeloma cells. The synthesized gene is then cloned into a vector and transfected into cells for cultivation. The resulting ADRB2 recombinant monoclonal antibody is then purified through affinity chromatography from the cell culture supernatant.

The ADRB2 protein plays an important role in regulating the body's response to stress and maintaining homeostasis. It is activated by the catecholamines adrenaline and noradrenaline, which are released by the sympathetic nervous system during the "fight or flight" response. Activation of ADRB2 can lead to a number of cellular responses, including relaxation of smooth muscle in the airways, enhanced heart rate and contractility, stimulation of lipolysis, increased glucose uptake in skeletal muscle, liver, and adipose tissue, and inhibition of the release of inflammatory mediators from immune cells.