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EB07133 - Goat Anti-ADRB1 Antibody

Size: 100µg specific antibody in 200µl



Target Protein

Principal Names: ADRB1, adrenergic, beta-1-, receptor, ADRB1R, B1AR, BETA1AR,

RHR, beta-1-adrenergic receptor

Official Symbol: ADRB1

Accession Number(s): NP_000675.1

Human GeneID(s): 153

Immunogen

Peptide with sequence ESDEARRCYNDPK, from the internal region of the protein sequence according to NP_000675.1.

Please note the peptide is available for sale.

Purification and Storage

Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide.

Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin.

Aliquot and store at -20°C. Minimize freezing and thawing.

Applications Tested

Peptide ELISA: antibody detection limit dilution 1:2000.

Western blot: This antibody is not recommended for use in Western blotting. **IHC:** Paraffin embedded Human Heart. Recommended concentration: 6µg/ml.

Immunofluorescence: Strong expression of the protein seen in the plama membrane

and cytoplasm of HeLa cells. Recommended concentration: 10µg/ml.

Species Reactivity

Tested: Human

Expected from sequence similarity: Human, Mouse, Rat, Dog

Specific References

This antibody has been successfully used in the following paper:

Ting-Yu Lin, Quynh N Mai, Hao Zhang, Emily Wilson, Huan-Chieh Chien, Sook Wah Yee,

Kathleen M Giacomini, Jeffrey E Olgin, Roshanak Irannejad

Cardiac contraction and relaxation are regulated by distinct subcellular cAMP pools.

Nat Chem Biol. 2023 Jul 20.

PMID: 37474759

This antibody (previous batch) has been successfully used in Assay Standardization of Rat Cardiomyocytes:

Gerd Wallukat, Harald Pruss, Johannes Muller, Ingolf Schimke

Functional autoantibodies in patients with different forms of dementia

PLoS One. 2018 Mar 14;13(3):e0192778.

PMID: 29538413

This antibody has been successfully used in the following paper:

Wenzel K, Schulze-Rothe S, Müller J, Wallukat G, Haberland A.

Difference between beta1-adrenoceptor autoantibodies of human and animal origin-Limitations detecting beta1-adrenoceptor autoantibodies using peptide based ELISA technology.

PLoS One. 2018 Feb 9;13(2):e0192615

PMID: 29425252

This antibody (previous batch) has been successfully used in the following paper:

Wenzel K, Schulze-Rothe S, Haberland A, Müller J, Wallukat G, Davideit H

Performance and in-house validation of a bioassay for the determination of beta1-auto antibodies found in patients with cardiomyopathy.

Heliyon. 2017 Jul 31;3(7): e00362.

PMID: 28795160

This antibody (previous batch) has been successfully used for In Vitro Testing of Apheresis Column Functionality in Rat:

Wallukat G, Haberland A, Berg S, Schulz A, Freyse EJ, Dahmen C, Kage A, Dandel M, Vetter R, Salzsieder E, Kreutz R, Schimke I.

The first aptamer-apheresis column specifically for clearing blood of β 1-receptor autoantibodies.

Circ J. 2012;76(10):2449-55.

PMID: 22850243

This antibody (previous batch) has been successfully used in IP on DNA aptamers in vitro:

Haberland A, Wallukat G, Dahmen C, Kage A, Schimke I.

Aptamer neutralization of beta1-adrenoceptor autoantibodies isolated from patients with cardiomyopathies.

Circ Res. 2011 Oct 14;109(9):986-92.

PMID: 21868696

This antibody (previous batch) has been successfully used in Assay Standardization (beating frequency) of Rat Cardiomyocytes:

Wallukat G, Muñoz Saravia SG, Haberland A, Bartel S, Araujo R, Valda G, Duchen D, Diaz Ramirez I, Borges AC, Schimke I.

Distinct patterns of autoantibodies against G-protein-coupled receptors in Chagas' cardiomyopathy and megacolon. Their potential impact for early risk assessment in asymptomatic Chagas' patients.

J Am Coll Cardiol. 2010 Feb 2;55(5):463-8.

PMID: 20117461

EB07133 (6µg/ml) staining of paraffin embedded Human Heart. Heat induced antigen retrieval with citrate buffer pH 6, HRP-staining.

EB07133 Negative Control showing staining of paraffin embedded Human Heart, with no primary antibody.

EB07133 Immunofluorescence analysis of paraformaldehyde fixed HeLa cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing membrane and cytoplasmic staining. The nuclear stain is DAPI (blue). Negative control: Unimmunized goat IgG (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml).