

**Datasheet for 600-401-MH1S****BETA 1 ADRENERGIC RECEPTOR Antibody****Overview**

|                      |                                                                  |
|----------------------|------------------------------------------------------------------|
| <b>Description:</b>  | Anti-Beta 1 Adrenergic Receptor (RABBIT) Antibody - 600-401-MH1S |
| <b>Item No.:</b>     | 600-401-MH1S                                                     |
| <b>Size:</b>         | 25 µL                                                            |
| <b>Applications:</b> | ELISA, FC, WB                                                    |
| <b>Reactivity:</b>   | Human                                                            |
| <b>Host Species:</b> | Rabbit                                                           |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
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| <b>Background:</b>   | The adrenergic beta1 receptor (beta1-adrenoceptor) is a member of the adrenergic receptor group of G-protein-coupled receptors that also includes alpha1A, alpha1B, alpha1D, alpha2A, alpha2B, alpha2C, beta2 and beta3. They are located primarily in the CNS, heart, coronary artery, kidney and muscle. Beta-adrenergic receptors mediate the catecholamine-induced activation of adenylate cyclase through the action of G proteins. This receptor binds epinephrine and norepinephrine with approximately equal affinity. Mediates Ras activation through G(s)-alpha- and cAMP-mediated signaling. Specific polymorphisms in this gene have been shown to affect the resting heart rate and can be involved in heart failure. Anti-Beta 1 Adrenergic Receptor Antibody is useful for researchers interested in cardiac function and G-protein signaling pathways. |
| <b>Synonyms:</b>     | Rabbit Anti-Beta-1 Adrenergic receptor Antibody, Rabbit Anti-Adrenergic $\beta$ 1R Antibody, Adrenoceptor Beta 1, Adrenergic Beta-1-Receptor, Beta-1 Adrenoreceptor, Beta-1 Adrenoceptor, Adrb1r, B1AR, Beta-1 Adrenergic Receptor, BETA1AR, RHR, Beta-1 adrenergic receptor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Host Species:</b> | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Format:</b>       | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

**Target Details**

|                    |       |
|--------------------|-------|
| <b>Gene Name:</b>  | ADRB1 |
| <b>Reactivity:</b> | Human |

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|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Immunogen Type:</b>     | Conjugated Peptide                                                                                                                                                                                                                                                                                                                               |
| <b>Immunogen:</b>          | Anti-Beta 1 Adrenergic Receptor (RABBIT) Antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal portion of human beta 1 adrenergic conjugated to Keyhole Limpet Hemocyanin (KLH).                                                                                |
| <b>Purity/Specificity:</b> | This affinity purified antibody is directed against human beta 1 adrenergic. This product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest cross-reactivity with the antigen based on 100% homology with the immunizing sequence to human, mouse, rat, and rhesus macaque. |
| <b>Relevant Links:</b>     | <ul style="list-style-type: none"> <li>• <a href="#">UniProtKB - P08588</a></li> <li>• <a href="#">NCBI - NP_000675.1</a></li> <li>• <a href="#">GeneID - 153</a></li> </ul>                                                                                                                                                                     |

## Application Details

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| <b>Tested Applications:</b> | ELISA, FC, WB                                                                                                                                                                                                                                                                                            |
| <b>Application Note:</b>    | Anti-Beta 1 Adrenergic Receptor Antibody has been tested in ELISA, WB, and FLOW. Expect a band at ~51kDa in western blot using appropriate lysates. Positive control used: human heart muscle membrane tissues in WB and NCCIT cells in FLOW. Although not tested, this antibody may be suitable in IHC. |
| <b>Assay Dilutions:</b>     | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                                                                                                                                          |
| <b>ELISA:</b>               | 1:10,000-1:15,000                                                                                                                                                                                                                                                                                        |
| <b>FC:</b>                  | 1:20                                                                                                                                                                                                                                                                                                     |
| <b>WB:</b>                  | 1:1000                                                                                                                                                                                                                                                                                                   |
| <b>Other:</b>               | User Optimized                                                                                                                                                                                                                                                                                           |

## Formulation

|                        |                                                            |
|------------------------|------------------------------------------------------------|
| <b>Physical State:</b> | Liquid (sterile filtered)                                  |
| <b>Concentration:</b>  | 0.97 mg/ml by UV absorbance at 280 nm                      |
| <b>Buffer:</b>         | 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 |
| <b>Preservative:</b>   | 0.01% (w/v) Sodium Azide                                   |
| <b>Stabilizer:</b>     | None                                                       |

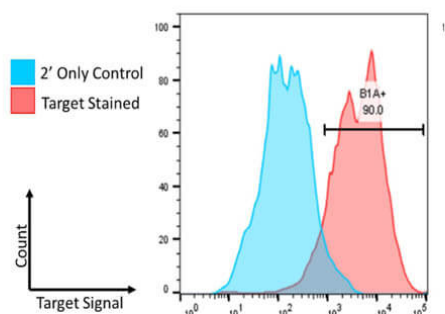
## Shipping & Handling

**Shipping Condition:** Dry Ice

**Storage Condition:** Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.

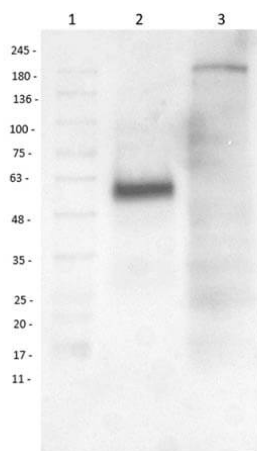
**Expiration:** Expiration date is one (1) year from date of receipt.

## Images



### Flow Cytometry

Flow Cytometry of Rabbit Anti-Beta 1 Adrenergic Receptor Antibody. Cells: NCCIT cells. Primary Antibody: Beta 1 Adrenergic Receptor Antibody at 5µL in 100µL FACS buffer for 30 mins at RT. Secondary Antibody: Donkey Anti-DyLight™488 (p/n 611-741-127) at 1:400 for 30 mins at RT.



### Western Blot

Western Blot of Rabbit Anti-Beta 1 Adrenergic Receptor Antibody. Lane 1: Opal Pre-Stained Molecular Weight Marker (p/n MB-210-0500). Lane 2: Human heart muscle membrane tissue lysate (35ug) [+]. Lane 3: K562 whole cell lysate (35ug) [-] (p/n W09-001-GJ7). Primary Antibody: Anti-Beta 1 Adrenergic Receptor at 1:1000 overnight at 2-8°C. Secondary Antibody: Goat Anti-Rabbit HRP (p/n 611-103-122) at 1:5000 for 30 ins at RT. Buffer: BlockOut (p/n MB-073). Predicted: 51 kDa with some glycosylation. Observed: ~58 kDa.

## Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.