

## Datasheet for 600-401-MR1

# PI 3 Kinase p85 alpha phospho Y607 Antibody

## Overview

|                      |                                                                  |
|----------------------|------------------------------------------------------------------|
| <b>Description:</b>  | Anti-PI 3 Kinase p85 alpha pY607 (RABBIT) Antibody - 600-401-MR1 |
| <b>Item No.:</b>     | 600-401-MR1                                                      |
| <b>Size:</b>         | 100 µg                                                           |
| <b>Applications:</b> | Dot Blot, ELISA, IHC                                             |
| <b>Reactivity:</b>   | Human                                                            |
| <b>Host Species:</b> | Rabbit                                                           |

## Product Details

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|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b>   | <p>PI 3-Kinases (phosphoinositide 3-kinases, PI 3-Ks) are responsible for coordinating a diverse range of cell functions, including proliferation and survival, and plays an important role in the metabolic actions of insulin, a mutation in this gene has been associated with insulin resistance. It binds to activated (phosphorylated) protein-Tyr kinases, through its SH2 domain, and acts as an adapter, mediating the association of the p110 catalytic unit to the plasma membrane. It is necessary for the insulin-stimulated increase in glucose uptake and glycogen synthesis in insulin-sensitive tissues. Phosphatidylinositol 3-kinase plays an important role in signaling in response to FGFR1, FGFR2, FGFR3, FGFR4, KITLG/SCF, KIT, PDGFRA and PDGFRB. Likewise, plays a role in ITGB2 signaling. Modulates the cellular response to ER stress by promoting nuclear translocation of XBP1 isoform 2 in a ER stress- and/or insulin-dependent manner during metabolic overloading in the liver and hence plays a role in glucose tolerance improvement. Anti-PI 3 Kinase p85 alpha pY607 Antibody is useful for researchers interested in studying Short Syndrome, Agammaglobulinemia 7 Autosomal Recessive, Gastric Cancer Research, and Interleukin-7 Signaling.</p> |
| <b>Synonyms:</b>     | <p>Rabbit Anti-Phosphoinositide-3-Kinase Regulatory Subunit 1, Phosphatidylinositol 3-Kinase 85 KDa Regulatory Subunit Alpha, Phosphoinositide-3-Kinase, Regulatory Subunit 1 (Alpha), Phosphatidylinositol 3-Kinase Regulatory Subunit Alpha, Phosphoinositide-3-Kinase Regulatory Subunit Alpha, PtdIns-3-Kinase Regulatory Subunit Alpha, PI3K Regulatory Subunit Alpha, PI3-Kinase Subunit P85-Alpha, GRB1, Phosphatidylinositol 3-Kinase, Regulatory Subunit, Polypeptide 1 (P85 Alpha), Phosphatidylinositol 3-Kinase-Associated P-85 Alpha, PtdIns-3-Kinase Regulatory Subunit P85-Alpha, PI3-Kinase Regulatory Subunit Alpha, P85-ALPHA, IMD36, AGM7, P85</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Host Species:</b> | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

**Format:** IgG

## Target Details

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| <b>Gene Name:</b>          | PIK3R1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Reactivity:</b>         | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>PTM Specificity:</b>    | Phosphorylation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Immunogen Type:</b>     | Conjugated Peptide                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Immunogen:</b>          | Anti-PI 3 Kinase p85 alpha pY607 antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic phospho-peptide corresponding to a C-Terminal portion of human PIK3R1 conjugated to Keyhole Limpet Hemocyanin (KLH).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Purity/Specificity:</b> | This affinity purified antibody is directed against the phosphorylated form of human PIK3R1 protein at the pY607 residue. This product was affinity purified from monospecific antiserum by immunoaffinity purification. The product was affinity purified from monospecific antiserum by immunoaffinity purification. Antiserum was first purified against the phosphorylated form of the immunizing peptide. The resultant affinity purified antibody was then cross adsorbed against the non-phosphorylated form of the immunizing peptide. Reactivity with non-phosphorylated human PIK3R1 Y607 is minimal by ELISA and dot blot. Reactivity against homologues from other sources is not known. A BLAST analysis was used to suggest reactivity with the antigen based on 100% homology with the immunizing sequence to human, mouse, and rat. |
| <b>Relevant Links:</b>     | <ul style="list-style-type: none"> <li><a href="#">UniProtKB - P27986</a></li> <li><a href="#">NCBI - NP_001229395.1</a></li> <li><a href="#">GeneID - 5295</a></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

## Application Details

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| <b>Tested Applications:</b> | Dot Blot, ELISA, IHC                                                                                                                                                                                                                |
| <b>Application Note:</b>    | Anti-PI 3 Kinase p85 alpha pY607 Antibody has been tested in ELISA, DB, and IHC. Expect a band at ~83.6kDa in western blot using appropriate tissues or lysates. Positive control used: Human Brain Tissue in Immunohistochemistry. |
| <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 - 1:50,000                                                                                                                                                                                                                 |
| <b>IF:</b>                  | User Optimized                                                                                                                                                                                                                      |
| <b>IHC:</b>                 | 1:100                                                                                                                                                                                                                               |

WB: User Optimized

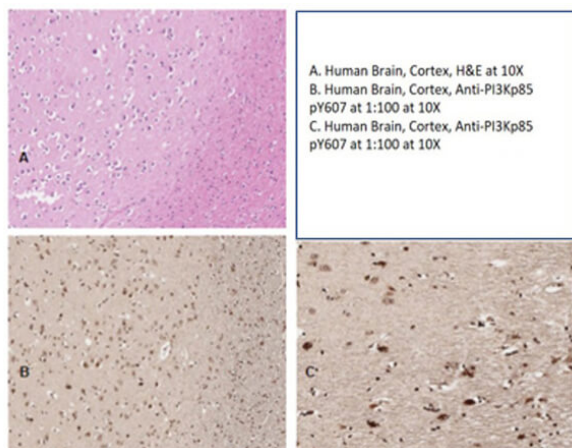
## Formulation

|                 |                                                            |
|-----------------|------------------------------------------------------------|
| Physical State: | Liquid (sterile filtered)                                  |
| Concentration:  | 0.80 mg/ml by UV absorbance at 280 nm                      |
| Buffer:         | 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 |
| Preservative:   | 0.01% (w/v) Sodium Azide                                   |
| Stabilizer:     | None                                                       |

## Shipping & Handling

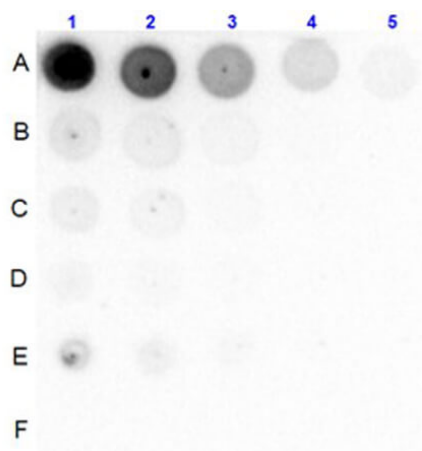
|                     |                                                                                                                                                                                                                                                                                                                                               |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Shipping Condition: | Dry Ice                                                                                                                                                                                                                                                                                                                                       |
| Storage Condition:  | Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use. |
| Expiration:         | Expiration date is one (1) year from date of receipt.                                                                                                                                                                                                                                                                                         |

## Images



### Immunohistochemistry

Immunohistochemistry of Rabbit Anti-PI 3 Kinase p85 alpha pY607 Antibody. Tissue: Human Brain Cortex. Fixative: none. Antigen Retrieval: HIER using Citrate Buffer for 20 minutes. Primary Antibody: Anti-PI3 Kinase p85 alpha pY607 at 1:100 for 30mins at RT. Secondary Antibody: Goat Anti-Rabbit Poly IgG HRP Ready-to-Use for 8 mins at RT. Counterstain: Hematoxylin. Substrate: DAB. Results: shows intense intracytoplasmic and intranuclear staining in neurons, glial cells in human brain cortex at both dilutions. There is diffuse mild neuropil staining.



#### Dot Blot

Dot Blot of Rabbit Anti-PI 3 Kinase p85 alpha pY607 Antibody. Dilution Columns: 1-100ng, 2-33.33ng, 3-11.11ng, 4-3.70ng, 5-1.23ng. Row A: PI 3 Kinase p85 alpha pY607-BSA conjugated Peptide. Row B: PI 3 Kinase p85 alpha non-phospho Y607-BSA conjugated Peptide. Row C: STAT3 pY705-BSA conjugated Peptide. Row D: STAT3 non-phospho Y705-BSA conjugated Peptide. Row E: Scrambled Sprouty-BSA conjugated peptide. Row F: BSA only. Primary Antibody: Anti-PI 3 Kinase p85 alpha pY607 at 1µg/mL overnight at 2-8°C. Secondary Antibody: Goat Anti-Rabbit IgG HRP (p/n 611-103-122) 1:70,000 for 1hr at RT. Blocking: Universal BlockOut Buffer (p/n MB-073). Exposure: 10 sec.

## 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.