

## Datasheet for 100-401-862

**PI3-kinase p110 delta Antibody****Overview**

<b>Description:</b>	Anti-PI3-kinase p110 $\delta$ (delta subunit) (RABBIT) Antibody - 100-401-862
<b>Item No.:</b>	100-401-862
<b>Size:</b>	100 $\mu$ L
<b>Applications:</b>	ELISA, IP, WB
<b>Reactivity:</b>	Human, Mouse
<b>Host Species:</b>	Rabbit

**Product Details**

<b>Background:</b>	Phosphoinositide 3-kinases (PI3Ks) generate 3-phosphoinositide lipids in cell membranes. A variety of intracellular target proteins interact with these lipids via specific lipid-binding modules and, as a consequence, undergo changes in their localization and/or activity. In this way, PI3Ks participate in the regulation of mitogenesis, differentiation, survival, intracellular vesicular transport, cytoskeletal reorganization, and motility. Tyrosine kinases and Ras use PI3Ks as essential intracellular signal relay molecules. PI3Ks are heterodimeric enzymes consisting of a regulatory subunit in complex with a p110 catalytic subunit. Mammals have genes encoding three distinct catalytic subunits (p110 $\alpha$ , p110 $\beta$ , and p110 $\delta$ ) and three regulatory subunits (p85 $\alpha$ , p85 $\beta$ , and p55 $\delta$ ). All of the p110 isoforms are capable of interacting with each type of regulatory subunit. They are also similarly recruited to phosphotyrosine complexes and have, at least in vitro, the same lipid substrate specificity. However, it is becoming increasingly clear that PI3K isoforms differ in their interaction with Ras and regulation of lipid kinase activity, and in their protein kinase activities. Several groups have provided evidence that p110 isoforms have nonredundant functions in the regulation of cell proliferation, survival, actin cytoskeleton reorganization, and migration downstream of given receptors. This antibody is specific for the carboxy terminal end of p110 $\delta$ that is expressed predominantly in leukocytes.
<b>Synonyms:</b>	rabbit anti-PI3-kinase p110 delta Antibody, p110D antibody, p110delta antibody, Phosphatidylinositol 3 kinase catalytic delta polypeptide antibody, Phosphatidylinositol 4 5 biphosphate 3 kinase catalytic subunit delta isoform antibody, PI3K antibody, PIK3CD antibody
<b>Host Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>Format:</b>	Antiserum

## Target Details

<b>Gene Name:</b>	Pik3cd
<b>Reactivity:</b>	Human, Mouse
<b>Immunogen Type:</b>	Conjugated Peptide
<b>Immunogen:</b>	This antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to a region near the C-terminal of mouse PI3K p110d. This sequence is identical in both mouse and human.
<b>Purity/Specificity:</b>	This antibody was prepared from whole rabbit antiserum by delipidation and defibrination. Reactivity occurs against mouse PI3K p110d subunit. Cross reactivity is expected against the human protein as the sequence of the immunogen is 100% identical in both human and mouse. Cross reactivity is also expected against rat PI3K p110d.
<b>Relevant Links:</b>	<ul style="list-style-type: none"><li>• <a href="#">UniProtKB - O35904</a></li><li>• <a href="#">NCBI - CAQ51669.1</a></li><li>• <a href="#">GeneID - 18707</a></li></ul>

## Application Details

<b>Tested Applications:</b>	ELISA, IP, WB
<b>Application Note:</b>	Anti-PI3 kinase p110 delta subunit antibody has been tested for use in ELISA, western blotting and immunoprecipitation. Reactivity in other immunoassays is unknown. A mouse whole cell splenic lysate is suitable for use as a positive control.
<b>Assay Dilutions:</b>	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
<b>ELISA:</b>	1:4,000 - 1:20,000
<b>WB:</b>	1:5,000

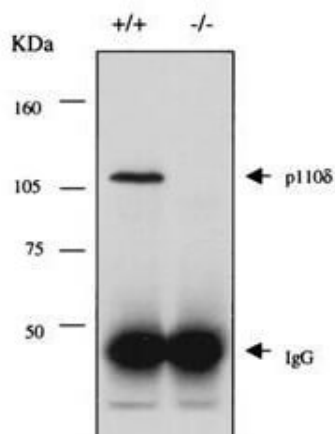
## Formulation

<b>Physical State:</b>	Liquid (sterile filtered)
<b>Concentration:</b>	85 mg/mL by Refractometry
<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

<b>Shipping Condition:</b>	Dry Ice
<b>Storage Condition:</b>	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.
<b>Expiration:</b>	Expiration date is one (1) year from date of receipt.

## Images



### Western Blot

Immunoprecipitation and western blot using ROCKLAND Immunochemical's Rabbit-anti-PI3K p110d antibody. Lane 1 shows the detection of a single band corresponding to mouse p110d detected in a lysate from p110d +/+ mice (lane 1) and the absence of staining in a similar lysate isolated from p110d -/- mice (lane 2). Molecular weight markers confirm a MW of ~120 kDa. In both instances 2 mg of a total splenic lysate was used for immunoprecipitation and western blot analysis. For IP use ~5 µl of antiserum. For WB use a 1:5,000 dilution of antiserum. Detection occurs using a 1:2,000 dilution of HRP Goat-a-Rabbit IgG (611-103-122) with visualization via ECL. Film exposure approximately 45". Other detection systems will yield similar results. See Jou et al for additional details.

## 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.