

Datasheet for ABIN6657601
anti-PIK3CD antibody (C-Term)[Go to Product page](#)

1 Image

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Overview

Quantity:	100 µL
Target:	PIK3CD
Binding Specificity:	C-Term
Reactivity:	Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PIK3CD antibody is un-conjugated
Application:	ELISA, Western Blotting (WB)

Product Details

Immunogen:	<p>Immunogen: 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.</p> <p>Immunogen Type: Peptide</p>
Cross-Reactivity:	Human, Mouse (Murine)
Cross-Reactivity (Details):	<p>Cross reactivity is expected against the human protein as the sequence of the immunogen is 100 % identical in both human and mouse</p> <p>Cross reactivity is also expected against rat PI3K p110d.</p>
Purification:	<p>This antibody was prepared from whole rabbit antiserum by delipidation and defibrination.</p> <p>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.</p>

Product Details

Cross reactivity is also expected against rat PI3K p110d.

Target Details

Target:	PIK3CD
Alternative Name:	PI3-kinase p110 delta (PIK3CD Products)
Background:	<p>Synonyms: rabbit anti-PI3-kinase p110 delta Antibody, p110D antibody, p110delta antibody, Phosphatidylinositol 3 kinase catalytic delta polypeptide antibody, Phosphatidylinositol 4 5 bisphosphate 3 kinase catalytic subunit delta isoform antibody, PI3K antibody, PIK3CD antibody</p> <p>Background: 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 (p110α, p110β, and p110δ and three regulatory subunits (p85α, p85β, and p55δ). 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 p110d that is expressed predominantly in leukocytes.</p> <p>Gene Name: PIK3CD</p>
Gene ID:	18707
UniProt:	O35904
Pathways:	BCR Signaling , Warburg Effect

Application Details

Application Notes:	Application Note: This antibody has been tested for use in ELISA, western blotting and immunoprecipitation. Reactivity in other immunoassays is unknown. A mouse whole cell
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Application Details

splenic lysate is suitable for use as a positive control.

ELISA Dilution: 1:4,000 - 1:20,000

Western Blot Dilution: 1:5,000

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

0.01 % (w/v) Sodium Azide

Stabilizer: None

Preservative: Sodium azide

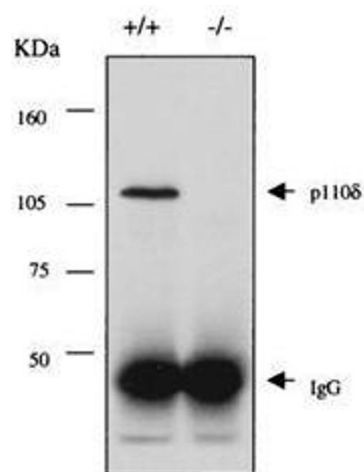
Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: RT, 4 °C, -20 °C

Storage Comment: 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.

Publications

Product cited in: Jou, Carpino, Takahashi, Piekorz, Chao, Carpino, Wang, Ihle: "Essential, nonredundant role for the phosphoinositide 3-kinase p110delta in signaling by the B-cell receptor complex." in: **Molecular and cellular biology**, Vol. 22, Issue 24, pp. 8580-91, (2003) ([PubMed](#)).



Western Blotting

Image 1. Anti-PI3K p110d Antibody - 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 with visualization via ECL. Film exposure approximately 45". Other detection systems will yield similar results. See Jou et al for additional details.