

Anti-PI 3 Kinase p110 delta PIK3CD Rabbit Monoclonal Antibody

Catalog # ABO14537

Product Information

Application	WB, IF, ICC
Primary Accession	O00329
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-PI 3 Kinase p110 delta PIK3CD Rabbit Monoclonal Antibody . Tested in WB, ICC/IF applications. This antibody reacts with Human, Mouse, Rat.

Additional Information

Gene ID	5293
Other Names	Phosphatidylinositol 4, 5-bisphosphate 3-kinase catalytic subunit delta isoform, PI3-kinase subunit delta, PI3K-delta, PI3Kdelta, PtdIns-3-kinase subunit delta, 2.7.1.137, 2.7.1.153, Phosphatidylinositol 4, 5-bisphosphate 3-kinase 110 kDa catalytic subunit delta, PtdIns-3-kinase subunit p110-delta, p110delta, PIK3CD
Calculated MW	119479
Application Details	WB 1:500-1:2000 ICC/IF 1:50-1:200
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: ADEO-16
Immunogen	A synthesized peptide derived from human PI 3 Kinase p110 delta
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

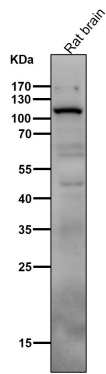
Protein Information

Name	PIK3CD
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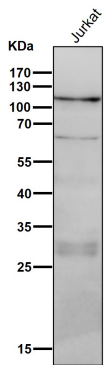
Function	Phosphoinositide-3-kinase (PI3K) phosphorylates phosphatidylinositol (PI) and its phosphorylated derivatives at position 3 of the inositol ring to produce 3-phosphoinositides (PubMed:9235916). Uses ATP and PtdIns(4,5)P₂ (phosphatidylinositol 4,5- bispophosphate) to generate phosphatidylinositol 3,4,5-trisphosphate (PIP₃) (PubMed:15135396). PIP₃ plays a key role by recruiting PH domain-containing proteins to the membrane, including AKT1 and PDPK1, activating signaling cascades involved in cell growth, survival, proliferation, motility and morphology. Mediates immune responses. Plays a role in B-cell development, proliferation, migration, and function. Required for B-cell receptor (BCR) signaling. Mediates B-cell proliferation response to anti-IgM, anti-CD40 and IL4 stimulation. Promotes cytokine production in response to TLR4 and TLR9. Required for antibody class switch mediated by TLR9. Involved in the antigen presentation function of B-cells. Involved in B-cell chemotaxis in response to CXCL13 and sphingosine 1-phosphate (S1P). Required for proliferation, signaling and cytokine production of naive, effector and memory T-cells. Required for T-cell receptor (TCR) signaling. Mediates TCR signaling events at the immune synapse. Activation by TCR leads to antigen-dependent memory T-cell migration and retention to antigenic tissues. Together with PIK3CG participates in T-cell development. Contributes to T-helper cell expansion and differentiation. Required for T-cell migration mediated by homing receptors SELL/CD62L, CCR7 and S1PR1 and antigen dependent recruitment of T-cells. Together with PIK3CG is involved in natural killer (NK) cell development and migration towards the sites of inflammation. Participates in NK cell receptor activation. Plays a role in NK cell maturation and cytokine production. Together with PIK3CG is involved in neutrophil chemotaxis and extravasation. Together with PIK3CG participates in neutrophil respiratory burst. Plays important roles in mast-cell development and mast cell mediated allergic response. Involved in stem cell factor (SCF)-mediated proliferation, adhesion and migration. Required for allergen-IgE-induced degranulation and cytokine release. The lipid kinase activity is required for its biological function. Isoform 2 may be involved in stabilizing total RAS levels, resulting in increased ERK phosphorylation and increased PI3K activity.
Cellular Location	Cytoplasm.
Tissue Location	In humans, the highest levels of expression are seen in peripheral blood mononuclear cells, spleen, and thymus, and low levels of expression in testes, uterus, colon, and small intestine but not in other tissues examined including prostate, heart, brain, and liver (PubMed:9235916). Isoform 2 is expressed in normal thymus, lung and spleen tissues, and is detected at low levels in normal lysates from colon and ovarian biopsies, at elevated levels in lysates from colorectal tumors and is abundantly expressed in some ovarian tumors (at protein level). Both isoform 1 and isoform 2 are widely expressed Isoform 1 is expressed predominantly in leukocytes

Images

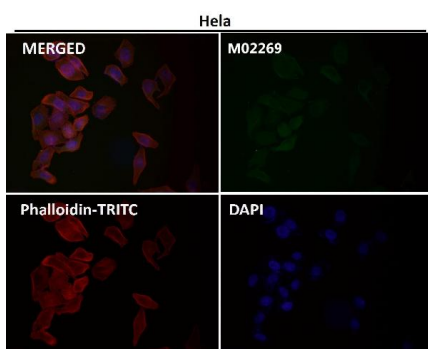
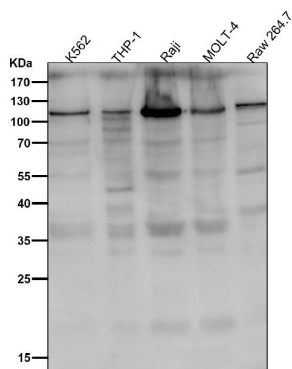
All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.



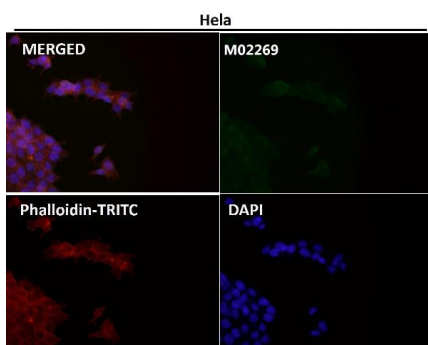
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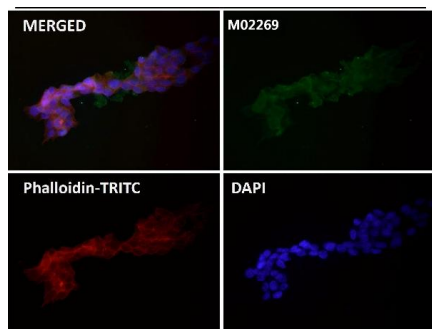
All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.



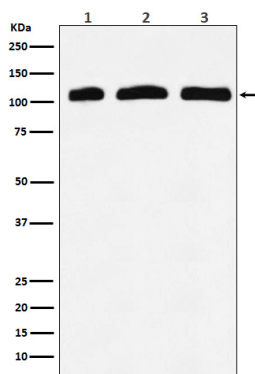
Immunofluorescent analysis using the Antibody at 1:50 dilution.



Immunofluorescent analysis using the Antibody at 1:50 dilution.



Immunofluorescent analysis using the Antibody at 1:50 dilution.



Western blot analysis of PI 3 Kinase p110 delta expression in (1) K562 cell lysate; (2) RAW 264. cell lysate; (3) Rat kidney lysate.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.