



# PI 3-Kinase p110 $\delta$ Monoclonal Antibody

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| <b>Catalog No</b>         | YP-mAb-15048                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Isotype</b>            | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Reactivity</b>         | Human;Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Applications</b>       | WB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Gene Name</b>          | PIK3CD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Protein Name</b>       | Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit delta isoform                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | The antiserum was produced against synthesized peptide derived from the N-terminal region of human PIK3CD. AA range:41-90                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Specificity</b>        | PI 3-Kinase p110 $\delta$ Monoclonal Antibody detects endogenous levels of PI 3-Kinase p110 $\delta$ protein.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Formulation</b>        | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Source</b>             | Monoclonal, Mouse,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Purification</b>       | The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Dilution</b>           | WB 1:500-1:2000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Concentration</b>      | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Purity</b>             | $\geq 90\%$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Storage Stability</b>  | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Synonyms</b>           | PIK3CD; Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit delta isoform; PI3-kinase subunit delta; PI3K-delta; PI3Kdelta; PtdIns-3-kinase subunit delta; Phosphatidylinositol 4,5-bisphosphate 3-kinase 110 kDa catalytic subunit delta; PtdIns-3-kinase subunit p110-delta; p110delta                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Observed Band</b>      | 120kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Cell Pathway</b>       | Cytoplasm .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Tissue Specificity</b> | 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. |
| <b>Function</b>           | catalytic activity:ATP + 1-phosphatidyl-1D-myo-inositol 4,5-bisphosphate = ADP + 1-phosphatidyl-1D-myo-inositol 3,4,5-trisphosphate.,pathway:Phospholipid metabolism; phosphatidylinositol phosphate                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |



biosynthesis.,PTM:Autophosphorylation on Ser-1039 results in the almost complete inactivation of the lipid kinase activity.,similarity:Belongs to the PI3/PI4-kinase family.,similarity:Contains 1 PI3K/PI4K domain.,subunit:Heterodimer of a p110 (catalytic) and a p85 (regulatory) subunit. Interacts with ERAS.,tissue specificity:Expressed predominantly in leukocytes.,

#### Background

Phosphoinositide 3-kinases (PI3Ks) phosphorylate inositol lipids and are involved in the immune response. The protein encoded by this gene is a class I PI3K found primarily in leukocytes. Like other class I PI3Ks (p110-alpha, p110-beta, and p110-gamma), the encoded protein binds p85 adapter proteins and GTP-bound RAS. However, unlike the other class I PI3Ks, this protein phosphorylates itself, not p85 protein.[provided by RefSeq, Jul 2010],

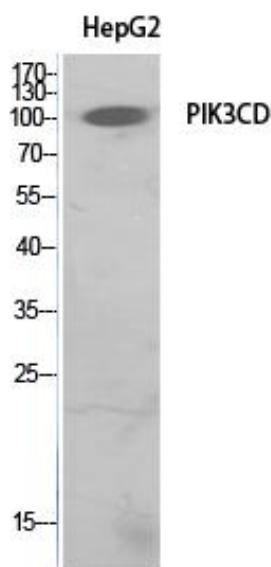
#### matters needing attention

Avoid repeated freezing and thawing!

#### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

### Products Images



Western Blot analysis of various cells using PI 3-Kinase p110  $\delta$  Monoclonal Antibody