

## Product datasheet for **AP20582PU-M**

### PI 3 Kinase catalytic subunit alpha (PIK3CA) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	<b>Western blot:</b> 1/500-1/1000. <b>Immunohistochemistry on paraffin sections</b> 1/50-1/200.
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Specificity:	This antibody detects endogenous levels of PI 3-kinase p110alpha protein. (region surrounding Arg519)
Formulation:	Phosphate buffered saline (PBS), pH 7.2. State: Aff - Purified State: Liquid purified Ig fraction Preservative: 0.05% sodium azide
Concentration:	1.0 mg/ml
Purification:	Affinity chromatography (> 95% (by SDS-PAGE)
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 110 kDa
Gene Name:	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit alpha
Database Link:	<a href="#">Entrez Gene 18706 Mouse</a> <a href="#">Entrez Gene 5290 Human</a> <a href="#">P42336</a>



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**Background:**

Phosphatidylinositol 3-kinase (PI 3-kinase) is composed of 85 kDa (p85) and 110 kDa (p110) subunits. p85 lacks PI 3-kinase activity and acts as an adapter, coupling p110 to activated protein tyrosine kinase. Two forms of p85 have been described (p85alpha and p85beta), each possessing one SH3 and two SH2 domains. Various p110 isoforms have been identified. p110alpha and p110beta interact with p85alpha, and p110alpha has also been shown to interact with p85beta in vitro. p110delta expression is restricted to white blood cells. It has been shown to bind p85alpha and beta, but it apparently does not phosphorylate these subunits. p110delta seems to have the capacity to autophosphorylate. p110gamma does not interact with the p85 subunits. It has been shown to be activated by alpha and beta-gamma heterotrimeric G proteins.

**Synonyms:**

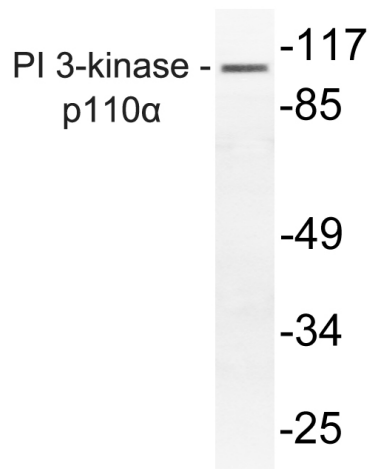
PIK3CA, EC=2.7.1.153, PI3-kinase p110 subunit alpha, PtdIns-3-kinase p110, PI3K

**Protein Families:**

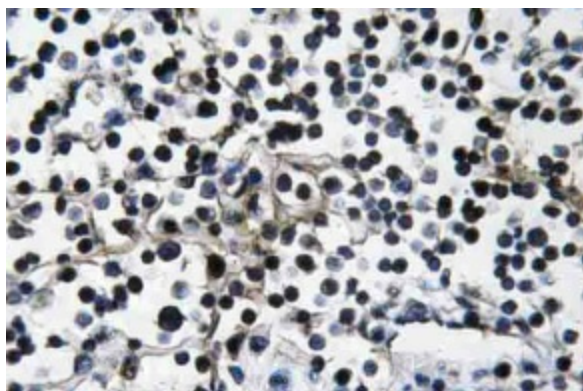
Druggable Genome

**Protein Pathways:**

Acute myeloid leukemia, Apoptosis, B cell receptor signaling pathway, Chemokine signaling pathway, Chronic myeloid leukemia, Colorectal cancer, Endometrial cancer, ErbB signaling pathway, Fc epsilon RI signaling pathway, Fc gamma R-mediated phagocytosis, Focal adhesion, Glioma, Inositol phosphate metabolism, Insulin signaling pathway, Jak-STAT signaling pathway, Leukocyte transendothelial migration, Melanoma, mTOR signaling pathway, Natural killer cell mediated cytotoxicity, Neurotrophin signaling pathway, Non-small cell lung cancer, Pancreatic cancer, Pathways in cancer, Phosphatidylinositol signaling system, Progesterone-mediated oocyte maturation, Prostate cancer, Regulation of actin cytoskeleton, Renal cell carcinoma, Small cell lung cancer, T cell receptor signaling pathway, Toll-like receptor signaling pathway, Type II diabetes mellitus, VEGF signaling pathway

**Product images:**


Western blot (WB) analysis of PI3-Kinase p110alpha antibody (Cat.-No.: [AP20582PU-N]) in extracts from mouse liver.



Immunohistochemistry (IHC) analyzes of PI 3-kinase p110alpha antibody (Cat.-No.: [AP20582PU-N]) in paraffin-embedded human lymph node tissue.