

Product name:	PI 3-kinase p110 α Rabbit Polyclonal Antibody
Cat number:	ABN16098
Conjugate:	Unconjugated
Size:	100 μ L
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human PI 3-kinase p110 α . AA range:470-519
Reactivity:	Human,Mouse,Rat
Applications:	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:20000-1:40000
Molecular Weight:	110kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

Phosphatidylinositol 3-kinase is composed of an 85 kDa regulatory subunit and a 110 kDa catalytic subunit. The protein encoded by this gene represents the catalytic subunit, which uses ATP to phosphorylate PtdIns, PtdIns4P and PtdIns(4,5)P₂. This gene has been found to be oncogenic and has been implicated in cervical cancers. A pseudogene of this gene has been defined on chromosome 22. [provided by RefSeq, Apr 2016], catalytic activity: ATP + 1-phosphatidyl-1D-myo-inositol 4,5-bisphosphate = ADP + 1-phosphatidyl-1D-myo-inositol 3,4,5-trisphosphate., disease: Defects in PIK3CA are associated with breast cancer [MIM:114480], disease: Defects in PIK3CA are associated with colorectal cancer (CRC) [MIM:114500], disease: Defects in PIK3CA are associated with ovarian cancer [MIM:167000]. Ovarian cancer is the leading cause of death from gynecologic malignancy. It is characterized by advanced presentation with loco-regional dissemination in the peritoneal cavity and the rare incidence of visceral metastases. These typical features relate to the biology of the disease, which is a principal determinant of outcome., disease: Defects in PIK3CA may underlie hepatocellular carcinoma (HCC) [MIM:114550], disease: PI3KCA mutations affecting exons 9 and 20 display gender- and tissue-specific patterns, thus suggesting that the different amino acid changes could exert distinct functional effects on the oncogenic properties of this enzyme. Furthermore, sexual dimorphisms and tissue specific factors might directly or indirectly influence the occurrence of PI3KCA cancer alleles., function: Phosphorylates PtdIns, PtdIns4P and PtdIns(4,5)P₂ with a preference for PtdIns(4,5)P₂., similarity: Belongs to the PI3/PI4-kinase family., similarity: Contains 1 C2 domain., similarity: Contains 1 PI3K/PI4K domain., subunit: Heterodimer of a p110 (catalytic) and a p85 (regulatory) subunit. Binds to IRS1 in nuclear extracts. Interacts with RUFY3.,