PIK3CA H1047R Rabbit mAb (Ready to Use)

Catalog No	YP-rAb-18279
Isotype	IgG
Reactivity	Human
Applications	IHC
Gene Name	PIK3CA
Protein Name	5-bisphosphate 3-kinase 110 kDa catalytic subunit alpha;5-bisphosphate 3-kinase catalytic subunit alpha isoform;caPI3K;CLOVE;CWS5;MCAP;MCM;MCMTC;MGC142161;MGC142163; p110 alpha;p110alpha;Phosphatidylinositol 3 kinase catalytic alpha polypeptide;Phosphatidylinositol 3 kinase catalytic 110 KD alpha;Phosphatidylinositol 4 5 bisphosphate 3 kinase catalytic subunit alpha;Phosphatidylinositol 4 5 bisphosphate 3 kinase catalytic subunit alpha isoform;Phosphatidylinositol 4,5 bisphosphate 3 kinase 110 kDa catalytic subunit alpha;Phosphatidylinositol-4;Phosphoinositide 3 kinase catalytic alpha polypeptide;PI 3 Kinase catalytic subunit alpha;PI3 kinase p110 subunit alpha;PI3-kinase subunit alpha;PI3K;PI3K-alpha;PI3KC A;PIK3C A;Pik3ca;PK3CA;PK3CA_HUMAN;PtdIns 3 kinase p110;PtdIns-3-kinase subunit alpha;PtdIns-3-kinase subunit p110-alpha;Serine/threonine protein kinase PIK3CA
Purification Process	Protein A
Specificity	This antibody detects endogenous levels of PIK3CA H1047R
Formulation	The prediluted ready-to-use antibody is diluted in phosphate buffer saline containing stabilizing protein and 0.05% Proclin 300
Source	Monoclonal, Rabbit,IgG
Dilution	Ready to use for IHC Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	2° C to 8° C/1 year,Ship by ice bag
Synonyms	5-bisphosphate 3-kinase 110 kDa catalytic subunit alpha ; 5-bisphosphate 3-kinase catalytic subunit alpha isoform ; caPI3K ; CLOVE ; CWS5 ; MCAP ; MCM ; MCMTC ; MGC142161 ; MGC142163 ; p110 alpha ; p110alpha ; Phosphatidylinositol 3 kinase catalytic alpha polypeptide ; Phosphatidylinositol 3 kinase catalytic 110 KD alpha ; Phosphatidylinositol 4 5 bisphosphate 3 kinase catalytic subunit alpha ; Phosphatidylinositol 4 5 bisphosphate 3 kinase catalytic subunit alpha isoform ; Phosphatidylinositol 4,5 bisphosphate 3 kinase 110 kDa catalytic subunit alpha ; Phosphatidylinositol-4 ; Phosphoinositide 3 kinase catalytic alpha polypeptide ; PI 3 Kinase catalytic subunit alpha ; PI3 kinase p110

	subunit alpha ; PI3-kinase subunit alpha ; PI3K ; PI3K-alpha ; PI3KC A ; PIK3C A ; Pik3ca ; PK3CA ; PK3CA_HUMAN ; PtdIns 3 kinase p110 ; PtdIns-3-kinase subunit alpha ; PtdIns-3-kinase subunit p110-alpha ; Serine/threonine protein kinase PIK3CA
Observed Band	
Calculated Molecular Weight	
Cell Pathway	Cytoplasmic
Tissue Specificity	Gastric adenocarcinoma with PIK3CA H1047R protein expression
Function	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.,
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],
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.