

## Immunotag™ PI3 kinase P110α Antibody

| Antibody Specification |  |
|------------------------|--|
| Catalog No.            | ITA1285  |
| Product Description    | Immunotag™ PI3 kinase P110α Antibody   |
| Size                   | 100 µg, 200 µg   |
| Conjugation            | HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647                                      |
| IMPORTANT NOTE         | This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return. |
| Target Protein         | PI3 kinase P110α   |
| Clonality              | Polyclonal   |
| Storage/Stability      | -20°C/1 year   |
| Application            | WB,IHC,ELISA   |
| Recommended Dilution   | WB 1:500-1:2000 IHC 1:50-1:200   |
| Concentration          | 1 mg/ml  |
| Reactive Species       | Human,Mouse,Rat  |
| Host Species           | Rabbit   |
| Immunogen              | A synthesized peptide derived from human PI3 kinase P110α  |
| Specificity            | PI3 kinase P110α Antibody detects endogenous levels of total PI3 kinase P110α  |
| Purification           | The antiserum was purified by peptide affinity chromatography.   |
| Form                   | Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt        |
| Gene Name              | PIK3CA   |
| Accession No.          | P42336   |

## Antibody Specification

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|---------------------------|---|
| Alternate Names           | 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; 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;   |
| Description               | Phosphoinositide-3-kinase (PI3K) that phosphorylates PtdIns (Phosphatidylinositol), PtdIns4P (Phosphatidylinositol 4-phosphate) and PtdIns(4,5)P2 (Phosphatidylinositol 4,5-bisphosphate) to generate phosphatidylinositol 3,4,5-trisphosphate (PIP3). PIP3 plays a key role by recruiting PH domain-containing proteins to the membrane, including AKT1 and PDK1, activating signaling cascades involved in cell growth, survival, proliferation, motility and morphology. Participates in cellular signaling in response to various growth factors. Involved in the activation of AKT1 upon stimulation by receptor tyrosine kinases ligands such as EGF, insulin, IGF1, VEGFA and PDGF. Involved in signaling via insulin-receptor substrate (IRS) proteins. Essential in endothelial cell migration during vascular development through VEGFA signaling, possibly by regulating RhoA activity. Required for lymphatic vasculature development, possibly by binding to RAS and by activation by EGF and FGF2, but not by PDGF. Regulates invadopodia formation through the PDK1-AKT1 pathway. Participates in cardiomyogenesis in embryonic stem cells through a AKT1 pathway. Participates in vasculogenesis in embryonic stem cells through PDK1 and protein kinase C pathway. Also has serine-protein kinase activity: phosphorylates PIK3R1 (p85alpha regulatory subunit), EIF4EBP1 and HRAS. Plays a role in the positive regulation of phagocytosis and pinocytosis (By similarity). |
| Cell Pathway/<br>Category | Primary Polyclonal Antibody   |
| Protein MW                | 124 kDa   |
| Usage                     | For Research Use Only! Not for diagnostic or therapeutic procedures.  |