

**产品名称:** PI 3 kinase p110 alpha (8X14) Rabbit Monoclonal Antibody

**产品货号:** AMRe16092

### 产品概述 (Summary)

|                   |                                                                                                                                                                                       |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 描述(Description)   | Recombinant rabbit monoclonal antibody                                                                                                                                                |
| 宿主(Host)          | Rabbit                                                                                                                                                                                |
| 应用(Application)   | WB, ICC/IF, IP                                                                                                                                                                        |
| 种属反应(Reactivity)  | Human, Mouse, Rat                                                                                                                                                                     |
| 偶联物(Conjugation)  | Unconjugated                                                                                                                                                                          |
| 修饰(Modification)  | Unmodified                                                                                                                                                                            |
| 同种型(Isotype)      | IgG                                                                                                                                                                                   |
| 克隆(Clonality)     | Monoclonal                                                                                                                                                                            |
| 剂型(Form)          | Liquid                                                                                                                                                                                |
| 保存条件(Storage)     | Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.<br>Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% New type preservative |
| 储存溶液(Buffer)      | N and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.                                                                                    |
| 纯化 (Purification) | Affinity purification                                                                                                                                                                 |

### 产品应用(Application)

|                       |                                                    |
|-----------------------|----------------------------------------------------|
| 稀释比(Dilution Ratio)   | WB 1:1000-1:5000, ICC/IF 1:100-1:200, IP 1:20-1:50 |
| 分子量(Molecular Weight) | 124kDa                                             |

### 抗原信息(Antigen Information)

|                       |                                                                                                                                                                               |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 基因名(Gene Name)        | PIK3CA                                                                                                                                                                        |
| 别名(Alternative Names) | PI 3 Kinase catalytic subunit alpha; phosphoinositide-3-kinase catalytic alpha polypeptide; PI3-kinase p110 alpha; PI3K; PI3K p110-alpha; PK3CA; PIK3CA; PtdIns-3-kinase p110 |
| 基因 ID(Gene ID)        | 5290.0                                                                                                                                                                        |
| SwissProt ID          | P42336                                                                                                                                                                        |
| 免疫原(Immunogen)        | A synthetic peptide of human PI 3 Kinase catalytic subunit alpha                                                                                                              |

### 研究背景 (Background)

Phosphoinositide-3-kinase (PI3K) that phosphorylates PtdIns (Phosphatidylinositol), PtdIns4P (Phosphatidylinositol 4-

phosphate) and PtdIns(4,5)P<sub>2</sub> (Phosphatidylinositol 4,5-bisphosphate) to generate phosphatidylinositol 3,4,5-trisphosphate (PIP<sub>3</sub>). PIP<sub>3</sub> 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. Phosphoinositide-3-kinase (PI3K) phosphorylates phosphatidylinositol (PI) and its phosphorylated derivatives at position 3 of the inositol ring to produce 3-phosphoinositides (PubMed:15135396, PubMed:23936502, PubMed:28676499). Uses ATP and PtdIns(4,5)P<sub>2</sub> (phosphatidylinositol 4,5-bisphosphate) to generate phosphatidylinositol 3,4,5-trisphosphate (PIP<sub>3</sub>) (PubMed:15135396, PubMed:28676499). PIP<sub>3</sub> 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. In addition to its lipid kinase activity, it displays a serine-protein kinase activity that results in the autophosphorylation of the p85alpha regulatory subunit as well as phosphorylation of other proteins such as 4EBP1, H-Ras, the IL-3 beta c receptor and possibly others (PubMed:23936502, PubMed:28676499). Plays a role in the positive regulation of phagocytosis and pinocytosis (By similarity).

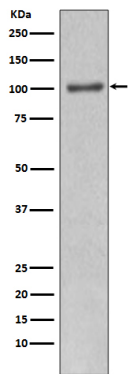
### 研究领域 (Research Area)

Inositol phosphate metabolism;ErbB\_HER;Chemokine;Phosphatidylinositol signaling system;mTOR;Apoptosis\_Inhibition;Apoptosis\_Mitochondrial;Apoptosis\_Overview;VEGF;Focal adhesion;Toll\_Like;Jak\_STAT;Natural killer cell mediated cytotoxicity;T\_Cell\_Receptor;B\_Cell\_Antigen;Fc epsilon RI;Fc gamma R-mediated phagocytosis;Leukocyte transendothelial migration;Neurotrophin;Regulates Actin and Cytoskeleton;Insulin\_Receptor;Progesterone-mediated oocyte maturation;Type II diabetes mellitus;Aldosterone-regulated sodium reabsorption;Pathways in cancer;Colorectal cancer;Renal cell carcinoma;Pancreatic cancer;Endometrial cancer;Glioma;Prostate cancer;Melanoma;Chronic myeloid leukemia;Acute myeloid leukemia;Small cell lung cancer;Non-small cell lung cancer;

### 注意事项 (Note)

For research use only.

### 图片 (Image Data)



Western blot analysis of PI 3 kinase p110 alpha expression in Jurkat cell lysate. Western blot analysis of PI 3 kinase p110 alpha expression in Jurkat cell lysate.

## EnkiLife 优势产品推荐

| 产品类别                        | 产品货号     | 产品名称                                               |
|-----------------------------|----------|----------------------------------------------------|
| WB 解决方案                     | RA10020  | 2h 极速 WB 即用型全流程试剂盒                                 |
|                             | RA10021  | 4h 快速 WB 即用型全流程试剂盒                                 |
|                             | RA10042  | 5h 畅享版 WB 全流程试剂盒                                   |
|                             | RA10037  | 校准级彩色预染蛋白 Marker (8-180kDa)                        |
|                             | RA10038  | 校准级彩色预染蛋白 Marker (10-250kDa)                       |
|                             | RA10039  | 校准级高分子彩色预染蛋白 Marker (25-400kDa)                    |
| TSA 多重荧光染色试剂盒               | RA10008  | TSA 双标三色多重荧光染色试剂盒 (mIHC)                           |
|                             | RA10009  | TSA 三标四色多重荧光染色试剂盒 (mIHC)                           |
|                             | RA10010  | TSA 四标五色多重荧光染色试剂盒 (mIHC)                           |
|                             | RA10011  | TSA 五标六色多重荧光染色试剂盒 (mIHC)                           |
|                             | RA10012  | TSA 六标七色多重荧光染色试剂盒 (mIHC)                           |
| IHC 检测试剂盒                   | RA10006  | HRP Anti-Mouse/Rabbit IHC Detection System         |
|                             | RA10007  | Polymer-HRP Anti-Mouse/Rabbit IHC Detection System |
| 抗体标记试剂盒                     | RE80004p | 辣根过氧化物酶(HRP)抗体标记试剂盒                                |
|                             | RE80002q | Sulfo-NHS-生物素标记试剂盒                                 |
|                             | RE80007p | Cy3 荧光素标记试剂盒                                       |
|                             | RE80011p | Fluor488 荧光素标记试剂盒                                  |
|                             | RE80017p | Fluor750 荧光素标记试剂盒                                  |
|                             | RE80005p | 藻红蛋白(R-PE) 抗体快速标记试剂盒                               |
|                             | RE80040  | PE-Cy7 串联染料抗体快速标记试剂盒                               |
| 稳转细胞系构建服务<br>(免费赠送全膜 WB 验证) | TS-0001  | 过表达稳转细胞系构建                                         |
|                             | TS-0002  | 敲低稳转细胞系构建                                          |
|                             | TS-0003  | 敲除细胞系构建                                            |

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