

**产品名称:** Akt (pan) Rabbit Monoclonal Antibody

**产品货号:** AMRe21259

## 产品概述 (Summary)

|                   |                                                                                          |
|-------------------|------------------------------------------------------------------------------------------|
| 描述(Description)   | Recombinant rabbit monoclonal antibody                                                   |
| 宿主(Host)          | Rabbit                                                                                   |
| 应用(Application)   | WB,IHC,ICC/IF,ELISA,IP                                                                   |
| 种属反应(Reactivity)  | Human,Mouse,Rat                                                                          |
| 偶联物(Conjugation)  | Unconjugated                                                                             |
| 修饰(Modification)  | Unmodified                                                                               |
| 同种型(Isotype)      | IgG,Kappa                                                                                |
| 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. |
| 储存溶液(Buffer)      | PBS, 50% glycerol, 0.05% Proclin 300, 0.05%protective protein                            |
| 纯化 (Purification) | Protein A                                                                                |

## 产品应用(Application)

|                       |                                                                                           |
|-----------------------|-------------------------------------------------------------------------------------------|
| 稀释比(Dilution Ratio)   | WB 1:2000-1:10000,IHC 1:200-1:1000,ICC/IF 1:200-1:1000,ELISA 1:5000-1:20000,IP 1:50-1:200 |
| 分子量(Molecular Weight) | Calculated MW:55kD;Observed MW:55kD                                                       |

## 抗原信息(Antigen Information)

|                       |                      |
|-----------------------|----------------------|
| 基因名(Gene Name)        | AKT1/AKT2/AKT3       |
| 别名(Alternative Names) |                      |
| 基因 ID(Gene ID)        | 207;208;10000        |
| SwissProt ID          | P31749;P31751;Q9Y243 |
| 免疫原(Immunogen)        |                      |

## 研究背景 (Background)

Cell localization:Cytoplasm . Nucleus . Cell membrane . Nucleus after activation by integrin-linked protein kinase 1 (ILK1). Nuclear translocation is enhanced by interaction with TCL1A. Phosphorylation on Tyr-176 by TNK2 results in its localization to the cell membrane where it is targeted for further phosphorylations on Thr-308 and Ser-473 leading to its activation and the

activated form translocates to the nucleus. Colocalizes with WDFY2 in intracellular vesicles (PubMed:16792529). ..AKT1 gene encodes one of the three members of the human AKT serine-threonine protein kinase family which are often referred to as protein kinase B alpha, beta, and gamma. These highly similar AKT proteins all have an N-terminal pleckstrin homology domain, a serine/threonine-specific kinase domain and a C-terminal regulatory domain. These proteins are phosphorylated by phosphoinositide 3-kinase (PI3K). AKT/PI3K forms a key component of many signalling pathways that involve the binding of membrane-bound ligands such as receptor tyrosine kinases, G-protein coupled receptors, and integrin-linked kinase. These AKT proteins therefore regulate a wide variety of cellular functions including cell proliferation, survival, metabolism, and angiogenesis in both normal and malignant cells. AKT proteins are recruited to the cell membrane by phosphatidylinositol 3,4,5-trisphosphate (PIP3) after phosphorylation of phosphatidylinositol 4,5-bisphosphate (PIP2) by PI3K. Subsequent phosphorylation of both threonine residue 308 and serine residue 473 is required for full activation of the AKT1 protein encoded by this gene. Phosphorylation of additional residues also occurs, for example, in response to insulin growth factor-1 and epidermal growth factor. Protein phosphatases act as negative regulators of AKT proteins by dephosphorylating AKT or PIP3. The PI3K/AKT signalling pathway is crucial for tumor cell survival. Survival factors can suppress apoptosis in a transcription-independent manner by activating AKT1 which then phosphorylates and inactivates components of the apoptotic machinery. AKT proteins also participate in the mammalian target of rapamycin (mTOR) signalling pathway which controls the assembly of the eukaryotic translation initiation factor 4F (eIF4E) complex and this pathway, in addition to responding to extracellular signals from growth factors and cytokines, is dysregulated in many cancers. Mutations in this gene are associated with multiple types of cancer and excessive tissue growth including Proteus syndrome and Cowden syndrome 6, and breast, colorectal, and ovarian cancers. Multiple alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Jul 2020] AKT2 gene is a putative oncogene encoding a protein belonging to a subfamily of serine/threonine kinases containing SH2-like (Src homology 2-like) domains, which is involved in signaling pathways. The gene serves as an oncogene in the tumorigenesis of cancer cells For example, its overexpression contributes to the malignant phenotype of a subset of human ductal pancreatic cancers. The encoded protein is a general protein kinase capable of phosphorylating several known proteins, and has also been implicated in insulin signaling. [provided by RefSeq, Nov 2019] The protein encoded by AKT3 is a member of the AKT, also called PKB, serine/threonine protein kinase family. AKT kinases are known to be regulators of cell signaling in response to insulin and growth factors. They are involved in a wide variety of biological processes including cell proliferation, differentiation, apoptosis, tumorigenesis, as well as glycogen synthesis and glucose uptake. This kinase has been shown to be stimulated by platelet-derived growth factor (PDGF), insulin, and insulin-like growth factor 1 (IGF1). Alternatively splice transcript variants encoding distinct isoforms have been described. [provided by RefSeq, Jul 2008]

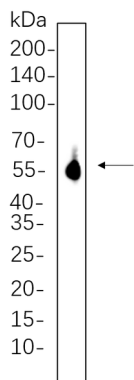
## 研究领域 (Research Area)

## 注意事项 (Note)

For research use only.

## 图片 (Image Data)

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HeLa whole cell lysates were separated by 10% SDS-PAGE, and the membrane was blotted with Akt (pan) Rabbit Monoclonal Antibody(1:1000). The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody.

## 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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