

# Pan-Akt Rabbit mAb

**Catalog No.: A22412** Recombinant

## Basic Information

**Observed MW**

60kDa

**Calculated MW**
**Category**

Primary antibody

**Applications**

WB, IHC-P, IP, (ELISA)

**Cross-Reactivity**

Human, Mouse, Rat

**CloneNo number**

ARC5005-12

## Background

Human AKT serine-threonine protein kinase family includes three members AKT1, AKT2, AKT3, which are also 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.

## Recommended Dilutions

<b>WB</b>	1:500 - 1:1000
<b>IHC-P</b>	1:50 - 1:200

## Immunogen Information

**Gene ID**

207/ 208/ 10000

**Swiss Prot**

P31749/P31751/Q9Y243

**Immunogen**

Recombinant fusion protein containing a sequence corresponding to amino acids 1-123 of human Pan-AktAKT1 (NP\_005154.2).

**Synonyms**

## Contact

 | 400-999-6126

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 | [www.abclonal.com.cn](http://www.abclonal.com.cn)

## Product Information

**Source**

Rabbit

**Isotype**

IgG

**Purification**

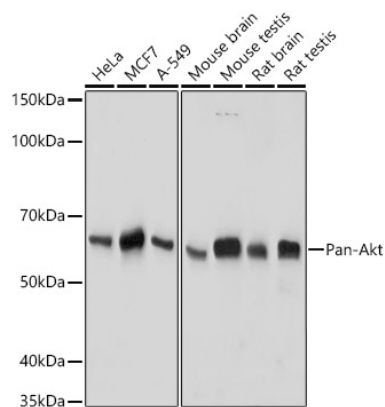
Affinity purification

**Storage**

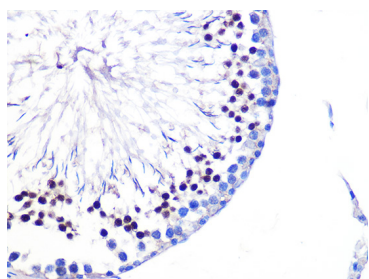
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.01% thimerosal, 0.05% BSA, 50% glycerol, pH7.3.

## Validation Data



Western blot analysis of various lysates, using Pan-Akt Rabbit mAb (A22412) at 1:1000 dilution.  
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.  
Lysates/proteins: 25µg per lane.  
Blocking buffer: 3% nonfat dry milk in TBST.  
Detection: ECL Basic Kit (RM00020).  
Exposure time: 5s.



Immunohistochemistry analysis of paraffin-embedded Rat testis using Pan-Akt Rabbit mAb (A22412) at dilution of 1:100 (40x lens).  
Microwave antigen retrieval performed with 0.01M Tris/EDTA Buffer (pH 9.0) prior to IHC staining.