



# Pan-Akt Mouse mAb

<b>Catalog No</b>	YP-mAb-18805
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human,Mouse,Rat
<b>Applications</b>	WB
<b>Gene Name</b>	
<b>Protein Name</b>	
<b>Immunogen</b>	Recombinant fusion protein containing a sequence corresponding to amino acids 311-480 of human AKT1/AKT2/AKT3
<b>Specificity</b>	
<b>Formulation</b>	
<b>Source</b>	
<b>Purification</b>	Affinity purification
<b>Dilution</b>	WB 1:500-2000
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	AKT1/AKT2/AKT3; Pan-Akt
<b>Observed Band</b>	60kDa
<b>Calculated Molecular Weight</b>	48kDa/55kDa/51kDa/54kDa
<b>Cell Pathway</b>	Transaminase with broad substrate specificity. Has transaminase activity towards amino adipate, kynurenine, methionine and glutamate. Shows activity also towards tryptophan, aspartate and hydroxykynurenine. Accepts a variety of oxo-acids as amino-group acceptors, with a preference for 2-oxoglutarate, 2-oxocaproic acid, phenylpyruvate and alpha-oxo-gamma-methyl butyric acid. Can also use glyoxylate as amino-group acceptor (in vitro).
<b>Tissue Specificity</b>	Mitochondrion .
<b>Function</b>	
<b>Background</b>	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.

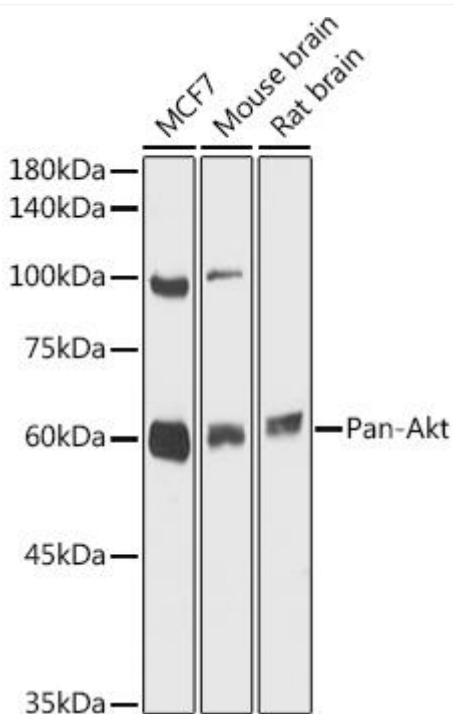
**matters needing attention**

Avoid repeated freezing and thawing!

**Usage suggestions**

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

### Products Images



Western blot analysis of various lysates using Pan-Akt Mouse pAb (A18120) at 1:1000 dilution. Secondary antibody: HRP-conjugated Goat anti-Mouse IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25 $\mu$ g per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 30s.