



Pan-Akt Mouse mAb

Catalog No	YP-mAb-18805
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB
Gene Name	
Protein Name	
Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 311-480 of human AKT1/AKT2/AKT3
Specificity	
Formulation	
Source	
Purification	Affinity purification
Dilution	WB 1:500-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	AKT1/AKT2/AKT3; Pan-Akt
Observed Band	60kDa
Calculated Molecular Weight	48kDa/55kDa/51kDa/54kDa
Cell Pathway	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).
Tissue Specificity	Mitochondrion .
Function	
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.

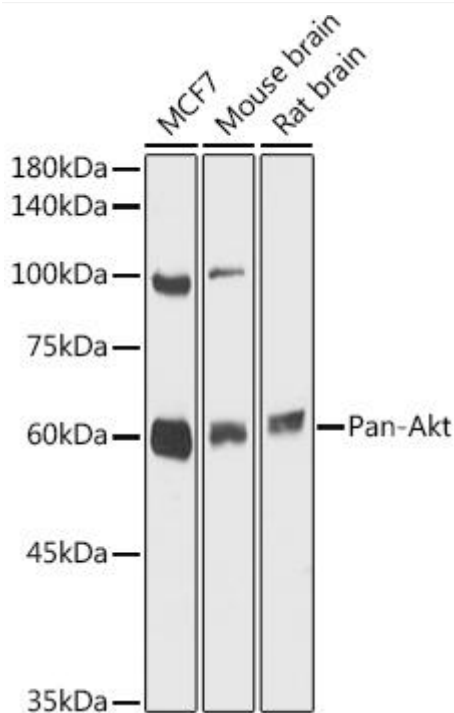
matters needing attention

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: 25μg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 30s.