

Product datasheet for **TA373418**

AKT1 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ICC/IF, IHC, IP, WB
Recommended Dilution:	WB,1:500 - 1:1000 IHC,1:50 - 1:100 IF,1:50 - 1:100 IP,1:50 - 1:100
Reactivity:	Human, Mouse, Rat
Modifications:	Unmodified
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	A synthetic peptide of human AKT1/AKT2/AKT3
Formulation:	Buffer: PBS with 0.02% sodium azide,50% glycerol,pH7.3.
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C. Avoid freeze / thaw cycles.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	48kDa/55kDa/51kDa/54kDa
Gene Name:	AKT serine/threonine kinase 1
Database Link:	Entrez Gene 207 Human P31749



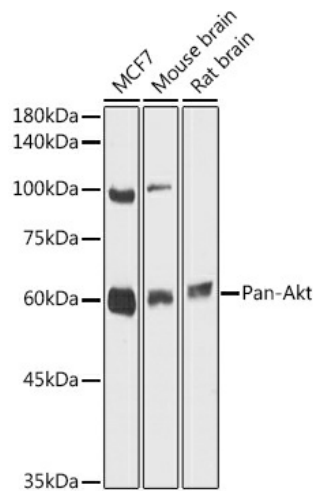
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Background:

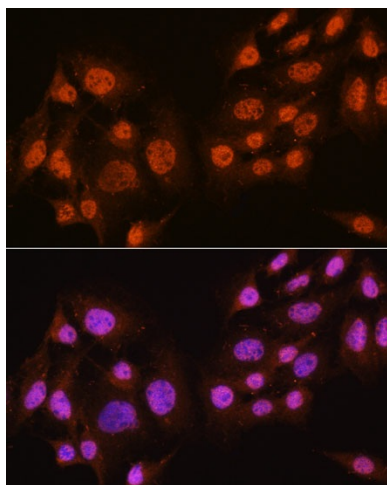
Human AKT serine-threonine protein kinase family includes three members AKT1, AKT2, AKT3, which are also often referred to as protein kinase B alpha, beta, and gamma. These highly similar AKT proteins all have an N-terminal pleckstrin homology domain, a serine/threonine-specific kinase domain and a C-terminal 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.

Synonyms:

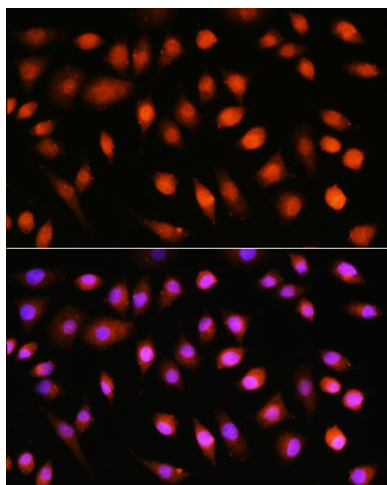
AKT; C-AKT; MGC99656; PKB; PKB-ALPHA; PRKBA; RAC; RAC-ALPHA; RAC-PK-alpha

Product images:

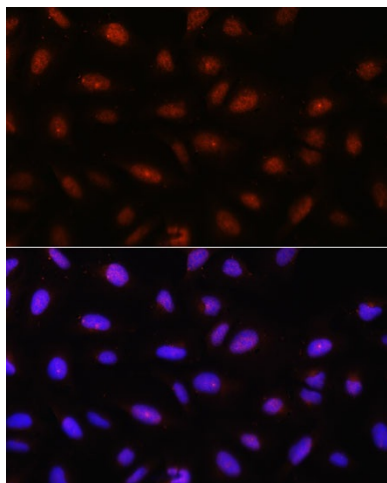
Western blot analysis of extracts of various cell lines, using Pan-Akt antibody (TA373418) at 1:1000 dilution. | Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution. | Lysates/proteins: 25ug per lane. | Blocking buffer: 3% nonfat dry milk in TBST. | Detection: ECL Basic Kit . | Exposure time: 30s.



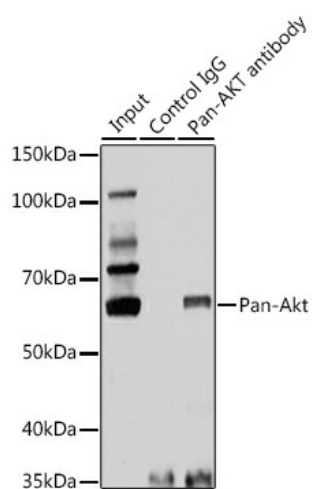
Immunofluorescence analysis of C6 cells using AKT1/AKT2/AKT3 antibody (TA373418) at dilution of 1:100. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of L929 cells using AKT1/AKT2/AKT3 antibody (TA373418) at dilution of 1:100. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of U-2 OS cells using AKT1/AKT2/AKT3 antibody (TA373418) at dilution of 1:100. Blue: DAPI for nuclear staining.



Immunoprecipitation analysis of 25ug extracts of Rat brain cells using 3ug Pan-Akt antibody (TA373418). Western blot was performed from the immunoprecipitate using Pan-Akt antibody (TA373418) at a dilution of 1:1000.