

Anti-Pan-Akt Rabbit pAb

Purified Rabbit Polyclonal Antibody

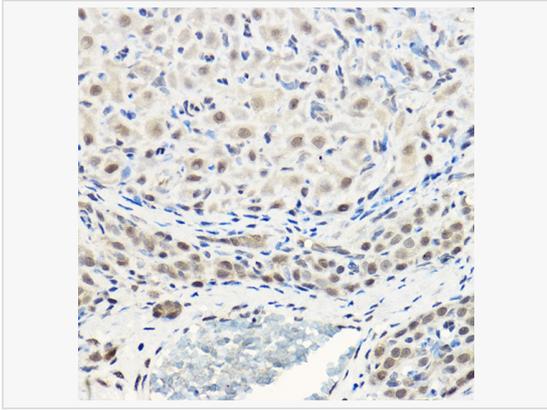
Catalog # P104226

Product Information

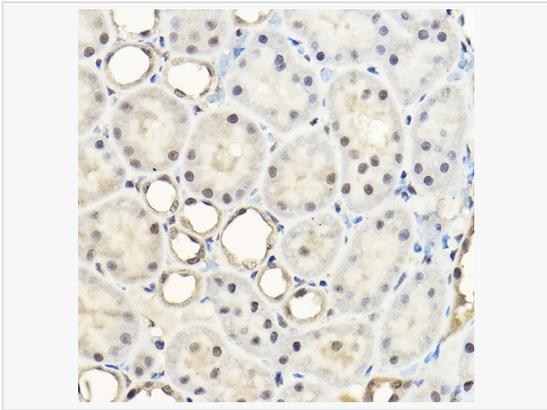
Application	WB, IHC-P/IF (Tissue-P), IF (Cell)/ICC, IP, ELISA
Reactivity	Human, Mouse, Rat
Dilution	WB 1:500~1:1,000; IHC-P 1:50~1:200; IF 1:50~1:100; IP 0.5μg-4μg antibody for 400μg-600μg extracts of whole cells
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Label	Unconjugated
Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 311-480 of human AKT1/AKT2/AKT3 (NP_005154.2).
Format	Affinity purified polyclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-Pan-Akt Rabbit pAb is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

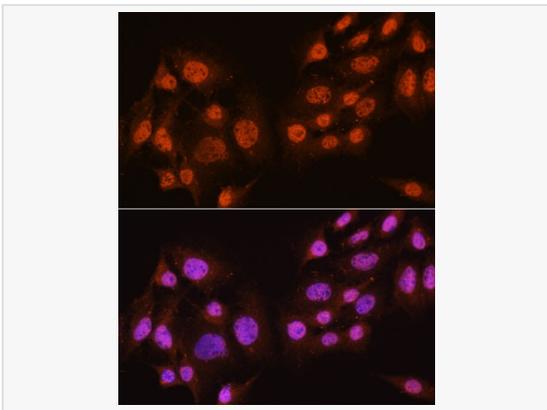
Synonyms	AKT1/AKT2/AKT3; Pan-Akt.
Calculated MW	Calculated MW: 48 kDa/55 kDa/51 kDa/54 kDa; Observed MW: 60 kDa
Uniprot ID	P31749, P31751, Q9Y243
Gene ID	207, 208, 10000
Background	Human AKT serine-threonine protein kinase family includes three members AKT1, AKT2, AKT3, which are also often referred 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.



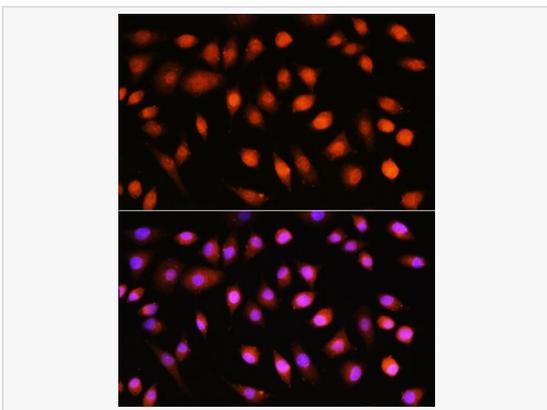
Immunohistochemistry analysis of paraffin-embedded Rat ovary using Pan-Akt Rabbit pAb (P104226) at dilution of 1:100 (40× lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.



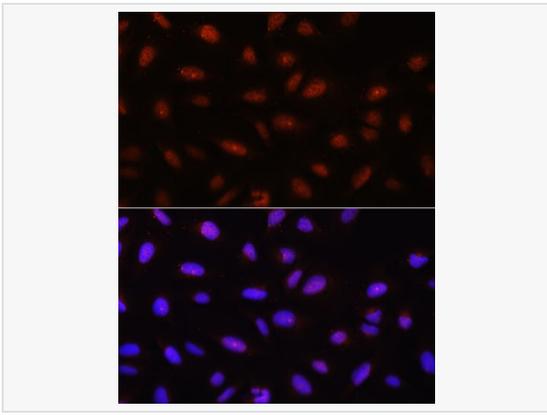
Immunohistochemistry analysis of paraffin-embedded Rat kidney using Pan-Akt Rabbit pAb (P104226) at dilution of 1:100 (40× lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.



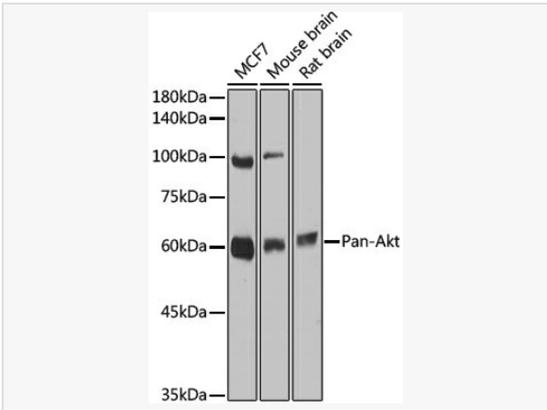
Immunofluorescence analysis of C6 cells using Pan-Akt Rabbit pAb (P104226) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of L929 cells using Pan-Akt Rabbit pAb (P104226) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of U-2 OS cells using Pan-Akt Rabbit pAb (P104226) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) at 1:500 dilution. Blue: DAPI for nuclear staining.



Western blot analysis of various lysates using Pan-Akt Rabbit pAb (P104226) at 1:1,000 dilution.

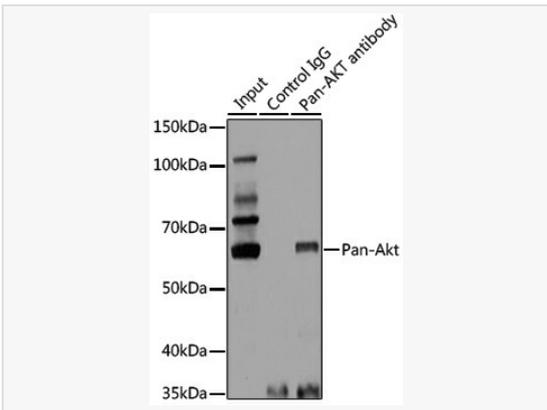
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (LF102) at 1:10,000 dilution.

Lysates/proteins: 25µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Kit.

Exposure time: 30s.



Immunoprecipitation analysis of 25 µg extracts of Rat brain cells using 3 µg Pan-Akt antibody (P104226). Western blot was performed from the immunoprecipitate using Pan-Akt antibody (P104226) at a dilution of 1:1000.