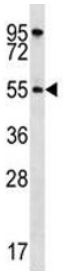
AKT1 Antibody (F50139)

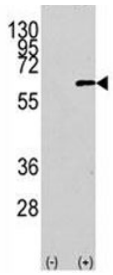
Catalog No.	Formulation	Size
F50139-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F50139-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

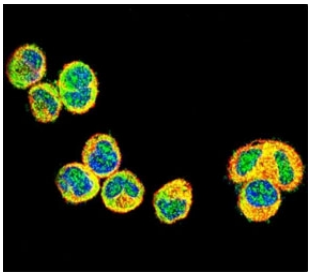
Availability	1-3 business days
Species Reactivity	Human
Predicted Reactivity	Mouse, Bovine
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	P31749
Applications	Western Blot : 1:1000 IHC (Paraffin) : 1:50-1:100 Immunofluorescence : 1:10-1:50 Flow Cytometry : 1:10-1:50
Limitations	This AKT1 antibody is available for research use only.



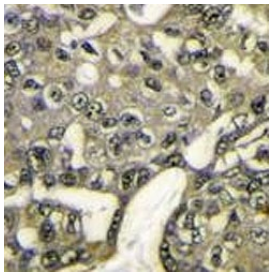
AKT1 antibody western blot analysis in HeLa lysate



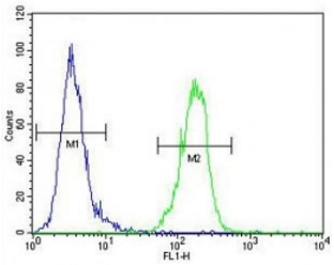
Western blot analysis of AKT1 antibody and 293 cell lysate (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the human gene (2).



IF testing of AKT1 antibody with MDA-MB435 cells followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green). Actin filaments stained red; DAPI nuclear counterstain (blue).



IHC analysis of FFPE human breast carcinoma stained with AKT1 antibody



AKT1 antibody flow cytometric analysis of MDA-MB435 cells (green) compared to a negative control (blue).

Description

AKT1 is catalytically inactive in serum-starved primary and immortalized fibroblasts. It and the related AKT2 are activated by platelet-derived growth factor. The activation is rapid and specific, and it is abrogated by mutations in the pleckstrin homology domain. It was shown that the activation occurs through phosphatidylinositol 3-kinase. In the developing nervous system AKT is a critical mediator of growth factor-induced neuronal survival. Survival factors can suppress apoptosis in a transcription-independent manner by activating the serine/threonine kinase AKT1, which then phosphorylates and inactivates components of the apoptotic machinery.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the AKT1 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 115-144 from the human protein was used as the immunogen for this AKT1 antibody.

Storage

Store at 4oC for up to one month. For long term, aliquot the AKT1 antibody and store frozen at -20oC or colder. Avoid

repeated freeze-thaw cycles.