Recombinant Phospho-AKT (Ser473) Monoclonal Antibody

catalog number: AN300086L

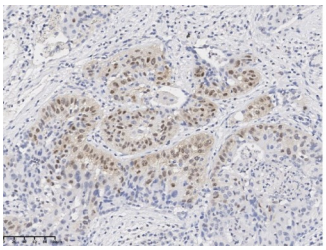
Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

Description

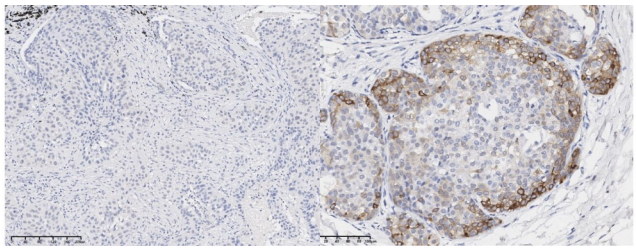
Reactivity	Human
Immunogen	A synthetic phosphopeptide corresponding to residues around Ser473 of human AKT.
Host	Rabbit
Isotype	IgG
Clone	A1196
Purification	Protein A
Buffer	10 mM sodium HEPES, 150 mM NaCl, 100 μg/mL protein protectant, 50% glycerol, pH 7.5

Applications	Recommended Dilution
WB	1:1000-1:200000
IHC-P	1:100-1:400

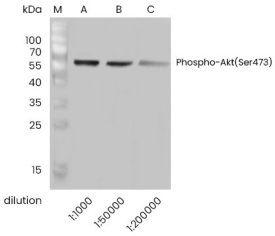
Data



Immunohistochemistry of paraffin-embedded human lung cancer tissue using Phospho-AKT (Ser473) Monoclonal Antibody at dilution of 1:200.



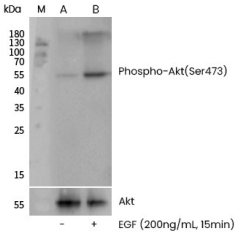
Immunohistochemistry of paraffin-embedded human breast cancer tissue using Phospho-AKT (Ser473) Monoclonal Antibody at dilution of 1:200.



Western blot analysis of extracts from serum-starved NIH-3T3 treated with PDGFA (5 μg/mL, 5 min; +), using Phospho-AKT (Ser473) Monoclonal Antibody at 1:1000, 1:50000, 1:200000 dilution.

Observed-MW:55 kDa

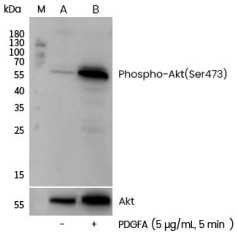
Calculated-MW:55 kDa

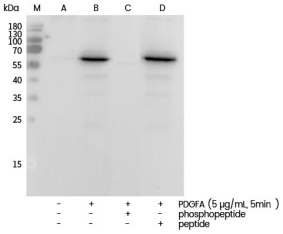


Western blot analysis of extracts from serum-starved A431, untreated (-); treated with EGF (200 ng/mL, 15 min; +), using Phospho-AKT (Ser473) Monoclonal Antibody at 1:2000 dilution (upper) or anti-Akt antibody (lower).

Observed-MW:55 kDa

Calculated-MW:55 kDa

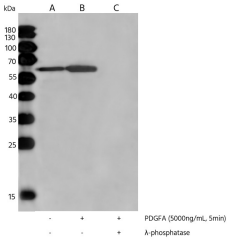




Western blot analysis of extracts from serum-starved NIH-3T3, untreated (-); treated with PDGFA (5 μg/mL, 5 min; +), using Phospho-AKT (Ser473) Monoclonal Antibody at 1:2000 dilution (upper) or anti-Akt antibody (lower).

Observed-MW:55 kDa

Calculated-MW:55 kDa



Western blot analysis of extracts from serum-starved NIH-3T3, untreated (line A); treated with PDGFA (5000 ng/mL, 5min; +) (line B); treated with PDGFA and λ-phosphatase (line C) using Phospho-AKT (Ser473) Monoclonal Antibody at 1:2000 dilution.

Observed-MW:55 kDa

Calculated-MW:55 kDa

Western blot analysis of extracts from serum-starved NIH-3T3, untreated (line A); treated with PDGFA (5 μg/mL, 5 min), without peptide (line B) or antigen-specific phosphopeptide (line C) or antigen-specific peptide (line D) using Phospho-AKT (Ser473) Monoclonal Antibody at 1:2000 dilution.

Observed-MW:55 kDa

Calculated-MW:55 kDa

Preparation & Storage

Storage	This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles.
Shipping	Ice bag

Background

The serine-threonine protein kinase encoded by the AKT1 gene is catalytically inactive in serum-starved primary and immortalized fibroblasts. AKT1 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 of AKT1. 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. Mutations in this gene have been associated with the Proteus syndrome. Multiple alternatively spliced transcript variants have been found for this gene.

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