

Anti-Phospho-AKT1 (Ser473) Antibody (6A70)

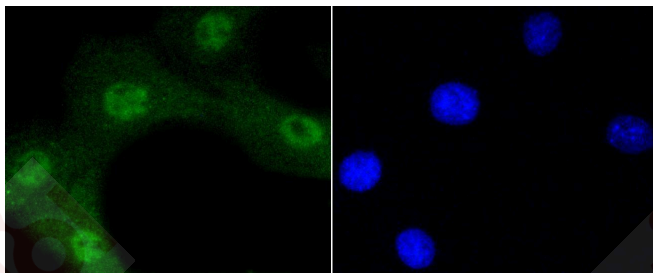
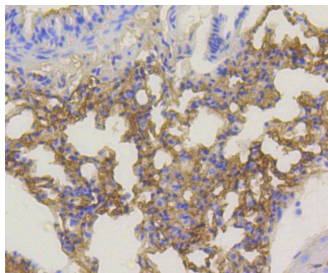
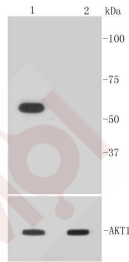
Product Details

Ig Type:	IgG
Reactivity:	Human,Mouse
Conjugation:	Unconjugated
Molecular Weight:	Theoretical: 56 kDa.
Clone:	6A70
Purification:	ProA affinity purified

Applications

Verified Activity:

1. Western blot analysis of Phospho-Akt1(Ser473) on different lysates using anti-Phospho-Akt1 (Ser473) antibody at 1/1,000 dilution. Positive control: Lane 1: NIH/3T3 treated with PDGF, Lane 2: NIH/3T3 untreated.
2. Immunohistochemical analysis of paraffin-embedded mouse lung tissue using anti-Phospho-Akt1 (Ser473) antibody. Counter stained with hematoxylin.
3. ICC staining Phospho-Akt1 (Ser473) in NIH/3T3 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



Application: ICC/IF,IHC,WB

Recommended WB: 1:1000-2000; IHC: 1:50-200; ICC/IF: 1:50-200

Properties

Stability & Storage: Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.

Shipping: Shipping with blue ice.

Antigen Details

Immunogen: A synthesized phosphopeptide: human Akt1 around the phosphorylation site of Ser473

Antigen Species: Human

Uniprot ID: P31749

Synonyms: p-AKT1 (S473);AKT1 (p-Ser473);p-AKT1 (Ser473);AKT1 (p-S473)

Research Background

The serine/threonine kinase Akt family contains several members, including Akt1 (also designated PKB or RacPK), Akt2 (also designated PKB β ; or RacPK- β ;) and Akt 3 (also designated PKB γ ; or thymoma viral proto-oncogene 3), which exhibit sequence homology with the protein kinase A and C families and are encoded by the c-Akt proto-oncogene. All members of the Akt family have a pleckstrin homology domain. Akt1 and Akt2 are activated by PDGF stimulation. This activation is dependent on PDGFR- β ; tyrosine residues 740 and 751, which bind the subunit of the phosphatidylinositol 3-kinase (PI 3-kinase) complex. Activation of Akt1 by insulin or insulin-growth factor-1(IGF-1) results in phosphorylation of both Thr 308 and Ser 473. Phosphorylation of both residues is important to generate a high level of Akt1 activity, and the phosphorylation of Thr 308 is not dependent on phosphorylation of Ser 473 in vivo. Thus, Akt proteins become phosphorylated and activated in insulin/IGF-1-stimulated cells by an upstream kinase(s). The activation of Akt1 and Akt2 is inhibited by the PI kinase inhibitor wortmannin, suggesting that the protein signals downstream of the PI kinases.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481
