

AKT MOUSE MAB

Cat.#: N261403

Product Name: Anti-AKT Mouse Monoclonal Antibody

Synonyms: AKT1

UNIPROT ID: P31749/P31751/Q9Y243

Background: Akt, also referred to as PKB or Rac, plays a critical role in controlling survival and apoptosis. This protein kinase is activated by insulin and various growth and survival factors to function in a wortmannin-sensitive pathway involving PI3 kinase. Akt is activated by phospholipid binding and activation loop phosphorylation at Thr308 by PDK1 and by phosphorylation within the carboxy terminus at Ser473.

Immunogen: Purified recombinant human AKT1 protein fragments expressed in E.coli. AKT1 interacts (via the C-terminus) with CCDC88A (via its C-terminus). Interacts with GRB10; the interaction leads to GRB10 phosphorylation thus promoting YWHAE-binding. By similarity. Interacts with AGAP2 (isoform 2/PIKE-A); the interaction occurs in the presence of guanine nucleotides. Interacts with AKTIP. Interacts (via PH domain) with MTCPI, TCL1A AND TCL1B. Interacts with CDKN1B; the interaction phosphorylates CDKN1B promoting 14-3-3 binding and cell-cycle progression. Interacts with MAP3K5 and TRAF6. Interacts with BAD, PPP2R5B, STK3 and STK4. Interacts (via PH domain) with SIRT1. Interacts with SRPK2 in a phosphorylation-dependent manner. Interacts with RAF1. Interacts with TRIM13; the interaction ubiquitinates AKT1 leading to its proteasomal degradation. Interacts with TNK2 and CLK2. Interacts (via the C-terminus) with THEM4 (via its C-terminus). Interacts with and phosphorylated by PDPK1. AKT2 interacts (via PH domain) with MTCPI, TCL1A AND TCL1B. Interacts with CLK2, PBH2 and TRAF6. AKT3 interacts (via PH domain) with TCL1A; this enhances AKT3 phosphorylation and activation. Interacts with TRAF6.

Applications: WB,IP

Recommended Dilutions: WB: 1/500-1/1000 IP: 1/20

Host Species: Mouse

Clonality: Mouse Monoclonal

Clone ID: 3B11-G8-B1

MW: Calculated MW: 56 kDa; Observed MW: 60 kDa

Isotype: IgG1

Purification: Affinity Purified

Species Reactivity: Human, Mouse, Rat

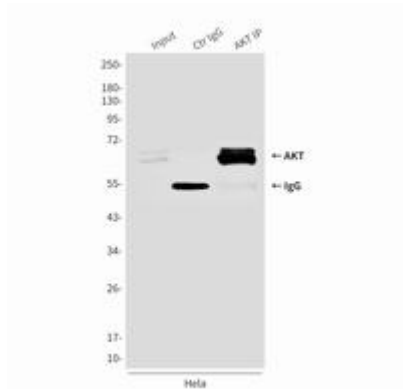
Conjugation: Unconjugated

Modification: Unmodified

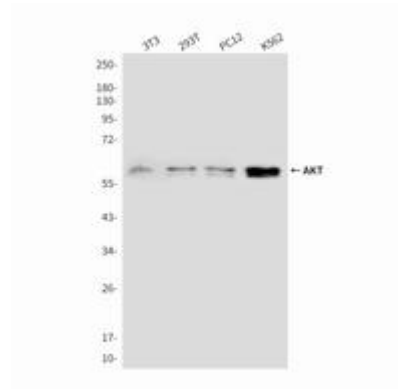
Constituents: PBS (without Mg²⁺ and Ca²⁺), pH 7.3 containing 50% glycerol, 0.5% BSA and 0.02% sodium azide

Research Areas: Signal Transduction

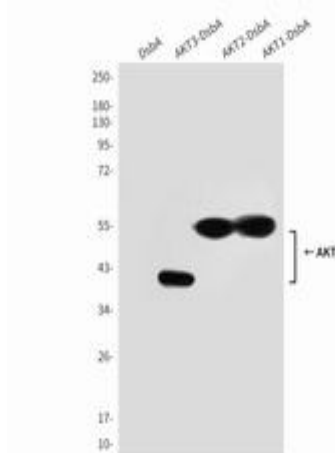
Storage & Shipping: Store at -20°C. Avoid repeated freezing and thawing



Immunoprecipitation analysis of AKT in HeLa lysates using AKT(pan) antibody.



Western blot analysis of total AKT in 3T3, 293T, PC-12 and K562 lysates using AKT(pan) antibody.



Western blot analysis of AKT1, AKT2, AKT3 and DSBA recombinant antigen using DSBA antibody, and (Right) AKT1, AKT2 and AKT3 recombinant antigen fragments using AKT(pan) antibody.