

## Anti-AKT3 FITC Monoclonal Antibody

Catalog Number: F00520

### About AKT3

AKT is a component of the PI-3 kinase pathway and is activated by phosphorylation at Ser 473 and Thr 308. AKT is a cytoplasmic protein also known as AKT1, Protein Kinase B (PKB) and rac (related to A and C kinases). AKT is a key regulator of many signal transduction pathways. AKT Exhibits tight control over cell proliferation and cell viability. Overexpression or inappropriate activation of AKT is noted in many types of cancer. AKT mediates many of the downstream events of PI 3-kinase (a lipid kinase activated by growth factors, cytokines and insulin). PI 3-kinase recruits AKT to the membrane, where it is activated by PDK1 phosphorylation. Once phosphorylated, AKT dissociates from the membrane and phosphorylates targets in the cytoplasm and the cell nucleus. AKT has two main roles: (i) inhibition of apoptosis; (ii) promotion of proliferation. Anti-AKT3 (MOUSE) PE conjugated Monoclonal Antibody is ideal for investigators involved in Cell Signaling, Cancer, Neuroscience, Signal Transduction research.

### Overview

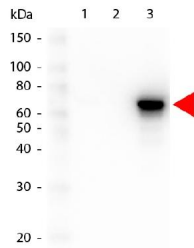
|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Name         | Anti-AKT3 FITC Monoclonal Antibody                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Reactive Species     | Human, Mouse, Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Description          | Boster Bio Anti-AKT3 FITC Monoclonal Antibody (Catalog # F00520). Tested in Dot blot, ELISA applications. This antibody reacts with Human, Mouse, Rat.                                                                                                                                                                                                                                                                                                                                                                        |
| Conjugate            | FITC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Application          | Dot blot, ELISA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Clonality            | Monoclonal Clone: 25F6.F6.D8 IgG1 kappa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Formulation          | 0.02 M Potassium Phosphate, 0.5 M Sodium Chloride, pH 7.2, 10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free, 0.01% (w/v) Sodium Azide                                                                                                                                                                                                                                                                                                                                                                   |
| Storage Instructions | Store vial at 4°C prior to restoration. Restore with deionized water (or equivalent). For extended storage aliquot contents and freeze at -20°C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4°C as an undiluted liquid. Dilute only prior to immediate use. Expiration date is one (1) year from date of restoration. Expiration date is one (1) year from date of opening. (Ship on dry ice.) |
| Host                 | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Uniprot ID           | Q9Y243                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

### Technical Details

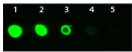
|           |                                                                                                                                                                                          |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Immunogen | Anti-AKT3 Antibody was prepared from tissue culture supernatant by Protein A affinity chromatography using a synthetic peptide corresponding to internal residues of human AKT3 protein. |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Predicted Reactive Species | Mouse, Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Isotype                    | IgG1 kappa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Form                       | Lyophilized                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Concentration              | 1.0 mg/mL by UV absorbance at 280 nm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Purification               | Anti-AKT3 antibody is directed against human AKT3. The antibody detects both unphosphorylated and phosphorylated forms of the protein. Anti-AKT3 antibody was purified from tissue culture by Protein A chromatography. Cross-reactivity with AKT3 from other species has not been determined, however, the sequence of the immunogen shows 100% identity to human, mouse, and rat, therefore, cross-reactivity is expected. Cross-reactivity with AKT2 and AKT has not been determined.                                                                                                                        |
| Suggested Dilutions        | <p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>ELISA: User optimized</p> <p>Flow Cytometry: User optimized</p> <p>Fluorochrome Protein Value: 2.7</p> <p>IHC: User optimized</p> <p>IF Microscopy: User optimized</p> <p>WB: User optimized</p> |

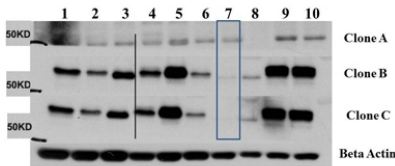
## Anti-AKT3 FITC Monoclonal Antibody (F00520) Images



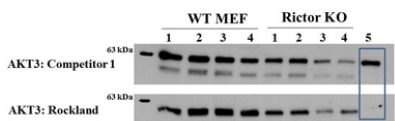
Western blot analysis of AKT3 expression in GST Tagged recombinant AKT1 (lane 1), GST Tagged recombinant AKT2 (lane 2) and GST Tagged recombinant AKT3 (lane 3). AKT3 at 78KD was detected using mouse anti-AKT3 unconjugated monoclonal antibody at 1:1000. The blot was developed using chemiluminescence (ECL) method (Catalog # EK1001).



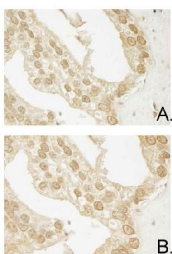
Dot Blot of mouse anti-AKT3 monoclonal antibody FITC conjugated (Catalog # F00520). Antigen: His-tagged AKT3. Load: Lane 1 -100 ng Lane 2 -33.3 ng Lane 3 -11.1 ng Lane 4 -3.70 ng Lane 5 -1.23 ng. Primary antibody: n/a. Secondary antibody: Mouse anti-AKT3 Monoclonal Antibody Fluorescein Conjugated at 1:1,000 for 60 min at RT. Block: MB-070 for 1 HR at RT.



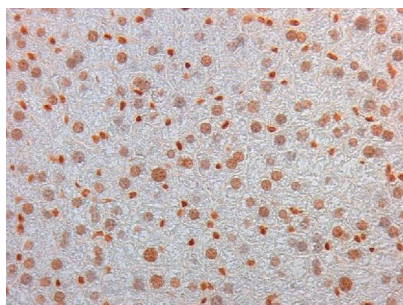
Western blot analysis of AKT3 expression in C2C12 Lysate (lane 1), MEF#1 Lysate (lane 2), MEF#2 Lysate (lane 3), A549 Lysate (lane 4), Calu-1 Lysate (lane 5), PC3 Lysate (lane 6), HepG2 Lysate (lane 7), Jurkat Lysate (lane 8), SKOV3 Lysate (lane 9) and 293T Lysate (lane 10). AKT3 at 56KD was detected using mouse anti-AKT3 unconjugated monoclonal antibody at 1:1000. The blot was developed using chemiluminescence (ECL) method (Catalog # EK1001).



Western blot analysis of AKT3 expression in Control (lane 1), Rapa Lysate (lane 2), T50 Lysate (lane 3), T250 Lysate (lane 4), Control (lane 5), Rapa Lysate (lane 6), T50 Lysate (lane 7), T250 Lysate (lane 8) and AKT3 null (lane 9). AKT3 at 56KD was detected using mouse anti-AKT3 unconjugated monoclonal antibody at 1:1000. The blot was developed using chemiluminescence (ECL) method (Catalog # EK1001).



AKT3 was detected in paraffin-embedded sections of human prostate carcinoma tissue using AKT-3 unconjugated antibody at 10



AKT3 was detected in paraffin-embedded sections of mouse embryonic kidney tissue using mouse anti-AKT3 unconjugated monoclonal antibody at 2 ug/mL. The immunohistochemical section was developed using SABC method (Catalog # SA1021).

## Submit a product review to Biocompare.com

Submit a review of this product to Biocompare.com to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



Anti-AKT3 FITC Monoclonal Antibody