

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.

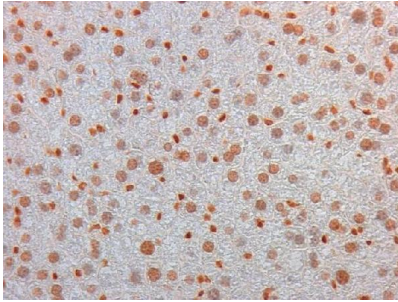
Overview

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	ELISA, Flow Cytometry, IF, IHC, WB
Clonality	Monoclonal Clone: 25F6.F6.D8 IgG1 kappa
Formulation	0.02 M Potassium Phosphate, 0.5 M Sodium Chloride, pH 7.2, antibody formulated with stabilizing protein (10 mg/mL) - Immunoglobulin and Protease free, 0.01% (w/v) Sodium Azide This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
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 wet ice.)
Host	Mouse
Uniprot ID	Q9Y243

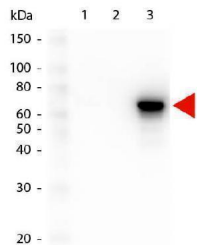
Technical Details

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>ELISA: User optimized Flow Cytometry: User optimized Fluorochrome Protein Value: 2.7 IHC: User optimized IF Microscopy: User optimized WB: User optimized</p> <p>Anti-AKT3 FITC Antibody has been tested by ELISA and dot blot and is suitable for Flow Cytometry, immunohistochemistry, and western blotting. Expect a band approximately 56 kDa in size corresponding to AKT3 protein by western blotting in the appropriate cell lysate or extract. This monoclonal antibody reacts with human AKT. Specific conditions for reactivity should be optimized by the end user. For immunohistochemistry we recommend the use of fresh frozen tissues. Attempts at staining paraffin-embedded formalin fixed tissues were negative. No pre-treatment of sample is required.</p>

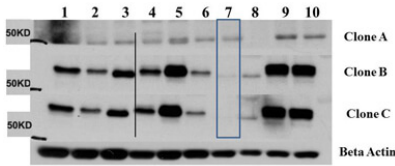
Anti-AKT3 FITC Monoclonal Antibody (F00520) Images



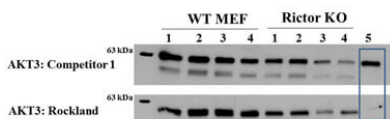
Immunohistochemistry of Mouse Monoclonal anti AKT3 Antibody in Mouse Embryonic Kidney. Tissue: Mouse Liver. Fixation: FFPE buffered formalin 10% conc. Ag Retrieval: Heat, Citrate pH 6.2. Pressure Cooker. Primary antibody: anti-AKT3 at 2ug/ml for 1.5 hour @ room Temp. Secondary Ab: MOUSE ON MOUSE HRP POLYMER 45" RT.



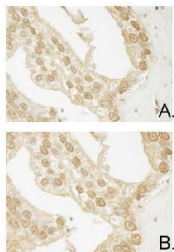
Western Blot of Mouse anti-AKT3 antibody. Lane 1: GST Tagged recombinant AKT1. Lane 2: GST Tagged recombinant AKT2. Lane 3: GST Tagged recombinant AKT3. Load: 25 ng per lane. Primary antibody: AKT3 antibody at 1:1,000 for overnight at 4°C. Secondary antibody: Peroxidase mouse secondary antibody at 1:40,000 for 30 min at RT. Block: 30 min at RT. Predicted/Observed size: 78 kDa for AKT3. Other band(s): none.



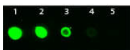
Western Blot of Mouse Anti-AKT3 antibody. Lane 1: C2C12. Lane 2: MEF#1. Lane 3: MEF#2. Lane 4: A549. Lane 5: Calu-1. Lane 6: PC3. Lane 7: HepG2. Lane 8: Jurkat. Lane 9: SKOV3. Lane 10: 293T. Load: 35 µg per lane. Primary antibody: AKT-3 antibody at 1:1000 for overnight at 4°C. Secondary antibody: Anti mouse secondary antibody at 1:20,000 for 1 h at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 56 kDa for AKT3.



Western Blot of Mouse anti-AKT3 antibody. Lane 1: Control. Lane 2: Rapa. Lane 3: T50. Lane 4: T250. Lane 5: Control. Lane 6: Rapa. Lane 7: T50. Lane 8: T250. Lane 9: AKT3 null. Load: 35 µg per lane. Primary antibody: AKT-3 antibody at 1:1000 for overnight at 4°C. Secondary antibody: Anti mouse secondary antibody at 1:20,000 for 1 h at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 56 kDa for AKT3.



Immunohistochemistry of Mouse Anti-AKT3 antibody. Tissue: human prostate carcinoma. A) AKT-3 antibody produced using CELLLine, B) AKT-3 antibody produced using roller bottle. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: AKT-3 antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Peroxidase mouse secondary antibody at 1:10,000 for 1 h at RT. Localization: AKT3 is nuclear and occasionally cytoplasmic. Staining: AKT3 as precipitated brown signal with hematoxylin purple nuclear counterstain.



Dot Blot of Mouse anti-AKT3 Monoclonal Antibody
Fluorescein Conjugated. 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: 1 HR at RT.

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Anti-AKT3 FITC Monoclonal Antibody

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