

Product Datasheet

Phospho-Akt1 (Ser473) rabbit mAb FITC conjugate Antibody (orb1946358)

Catalog Number	orb1946358
Category	Antibodies
Description	<p>Akt also known as PKB (Protein kinase B) or RAC-PK (Related to the A and C kinases) is a serine/threonine kinases that contains a pleckstrin homology (PH) domain. 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. Phospho-Akt promotes cell survival by inhibiting apoptosis. Specifically, phospho-Akt1 has been shown to phosphorylate Bad, a member of the Bcl-2 family that promotes cell death. This phosphorylation results in the inactivation of the proapoptotic function of Bad. The Akt/phospho Akt molecule is thus considered to link extracellular survival signals (growth factors) with the apoptotic machinery (BAD). Akt is also a key mediator of the metabolic effects of insulin. Additionally, phospho Akt has been referred to as an oncogene because it has increased activity in a number of tumors. This antibody recognizes phospho Akt phosphorylated at Ser473. This phosphorylation site is shared by all three isoforms of phospho Akt. The homologous phosphorylation sites in Akt2 and Akt3 are S474 and S472, respectively.</p>
Clonality	Monoclonal
Species/Host	Rabbit
Isotype	Rabbit IgG1k
Conjugation	FITC
Reactivity	Human, Mouse
Form/Appearance	Liquid

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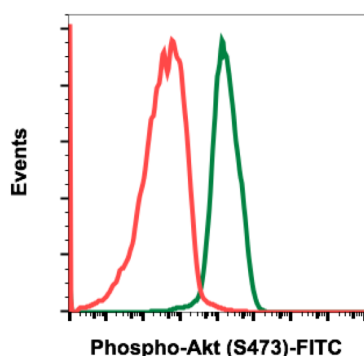
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Buffer/Preservatives	1X PBS, 0.09% NaN ₃ , 0.2% rAlbumin
Purification	Protein A+G
Immunogen	A synthetic phospho-peptide corresponding to residues surrounding Ser473 of human phospho Akt1
UniProt ID	P31749
Tested applications	FC
Dilution range	For flow cytometric staining, the suggested use of this reagent is 5 µL per million cells or 5 µL per 100 µL of staining volume. It is recommended that the reagent be titrated for optimal performance for each application.
Cross Reactivity	Predicted to work with mouse, rat and other homologues.
Clone Number	BE9
Storage	2-8°C
Note	For research use only
Expiration Date	12 months from date of receipt.



Flow cytometric analysis of U937 cells treated with LY294002 (red) or with calyculin A (green) using Phospho-Akt (Ser473) C7-FITC conjugate antibody AktS473-C7-FITC. Cat. #orb1946358.

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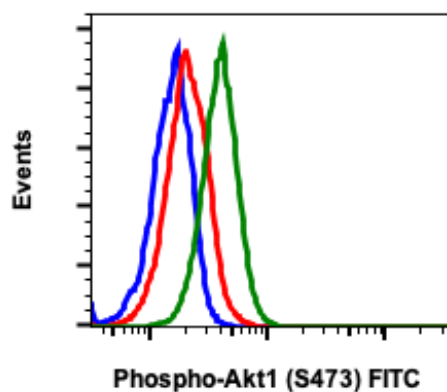
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Flow cytometric analysis of NIH3T3 cells treated with imatinib (red) or with pervanadate (green) using Phospho-Akt (Ser473) C7-FITC conjugate antibody AktS473-C7-FITC. Cat. #orb1946358.

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