Phospho-Akt1 (Thr308) (G12) rabbit mAb

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Catalog: #2286

Store at: -20ºC

For Research Use Only. Not For Use In Diagnostic Procedures.

Applications	Detection	Clonality	Isotype
Flow Cytometry,WB	Anti-Rabbit IgG	Monoclonal	Rabbit IgGk

Format: Unconjugated

Cross Reactivity: Predicted to work with mouse, rat and other homologues.

Formulation: 1X PBS, 0.02% NaN3, 50% Glycerol, 0.1% BSA

Preparation: Protein A+G

Reactivity: Human,Mouse

Recommended Usage: 1µg/mL – 0.001µg/mL. It is recommended that the reagent be titrated for optimal performance for each application. See product image legends for additional information.

Immunogen: A synthetic phospho-peptide corresponding to residues surrounding Thr308 of human phospho Akt1

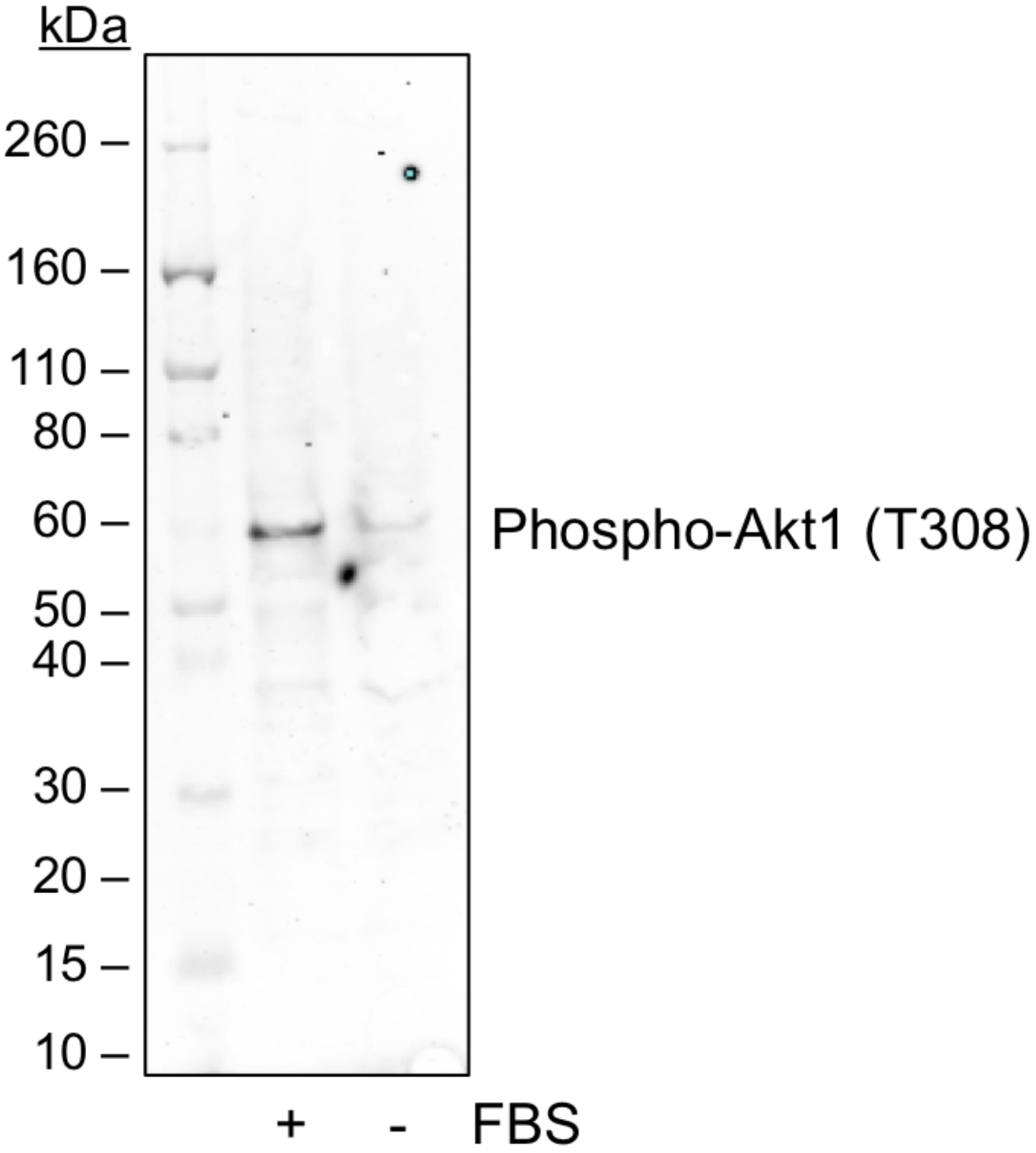
Description: Akt also known as PKB (Protein kinase B) or RAC-PK (Related to the A and C kinases) is a serine/threonine kinases that contains a pleckstrin homology (PH) domain. This protein kinase is activated by insulin and various growth and survival factors to function in a wortmannin sensitive pathway 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, 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.

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References:

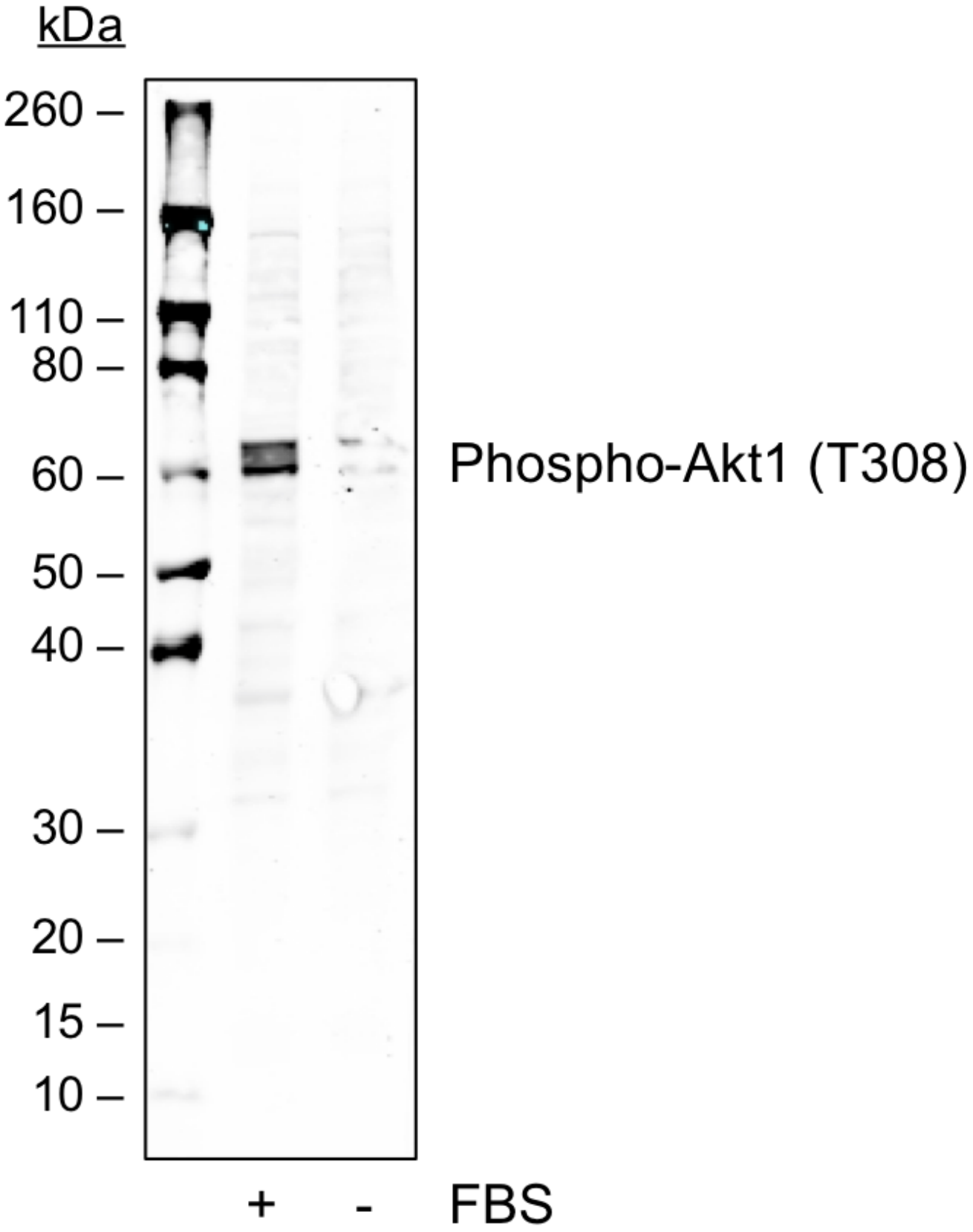
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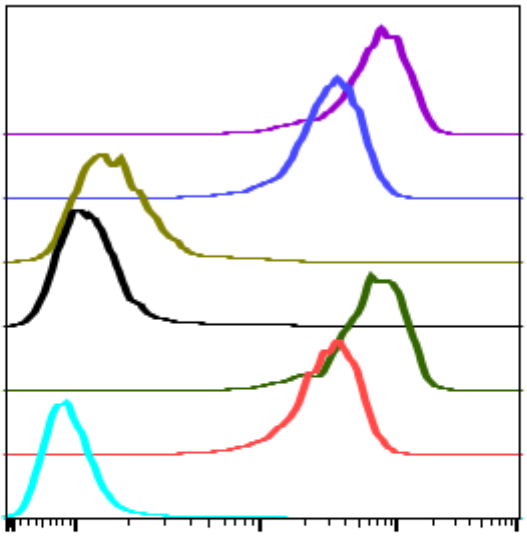
Western blot analysis of 293T cell extract untreated or treated with 20% FBS using Phospho-Akt1 (Thr308) antibody AktT308-G12 at 0.1 ug/mL. Cat. #2286.

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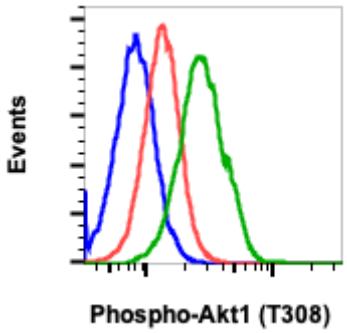
Western blot analysis of NIH3T3 cell extract untreated or treated with 20% FBS using Phospho-Akt1 (Thr308) antibody AktT308-G12 at 0.1 ug/mL. Cat. #2286.

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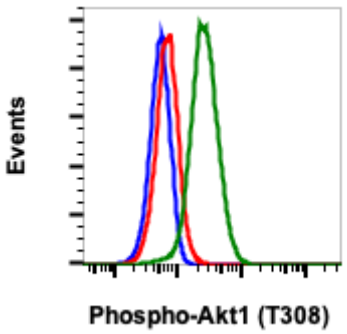


	IgG	Treatment	Peptide Block	Median : BL1-A
☐	G12	IFN	Non-phos	70920
☐	G12	LY29	Non-phos	30770
☐	G12	IFN	Phos	1620
☐	G12	LY29	Phos	1178
☐	G12	IFN	-	66394
☐	G12	LY29	-	29664
☐	2° only	LY29	-	870

Peptide blocking flow cytometric analysis of K562 cells secondary antibody only negative control (light blue) or treated with LY294002 (red) or with IFNα + IL-4 + pervanadate (green) or LY294002 and blocked with phospho-peptide (black) or IFN+IL4+Pv and blocked with phospho peptide (gold) or LY294002 and blocked with non-phospho peptide (dark blue) or IFN+IL4+Pv and blocked with non-phospho peptide (purple) using Phospho-Akt1 (Thr308) antibody AktT308-G12 at 0.5 µg/mL. Cat. #2286.



Flow cytometric analysis of NIH3T3 cells treated with LY294002+U0126+wortmanin and stained with secondary antibody as negative control (blue) or treated with LY294002+U0126+wortmain (red) or with PDGF (green) and stained using Phospho-Akt1 (Thr308) antibody AktT308-G12 at 0.01 µg/mL. Cat. #2286.



Flow cytometric analysis of C6 cells unstained and treated with imatinib as negative control (blue) or treated with imatinib or with PDGF (green) using Phospho-Akt1 (Thr308) antibody AktT308-G12 at 0.01 µg/mL. Cat. #2286.

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