

Anti-Akt2 (PKBB)

Catalog# SPC-148F

Size: 400µl

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Victoria, BC V8X 5E1, Canada

This product is for *in vitro* research use only and is not intended for use in humans or animals

StressMarq

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Product	Rabbit, Akt2 (PKB beta), polyclonal
Clone	N/A
Immunogen	A five residue synthetic peptide based on the human Akt2, coupled to KLH
Host and Subclass	Rabbit polyclonal
Cited Applications	WB (3), ELISA
Specificity	Detects a ~65kDa protein, corresponding to the molecular mass of Akt2 PKB beta on SDS-PAGE immunoblots. Does not react with PKBα (Akt1) or PKBγ (Akt3).
Species cross-reactivity	Human, Mouse, Rat, Bovine, Chicken, Dog, Guinea pig, Hamster, Monkey, Pig, Rabbit, Sheep, <i>Xenopus</i> .
Format	Rabbit immunoglobulin in 0.1M Tris-acetate buffer, 0.1% sodium azide. Affinity Purified
Concentration and working dilution	0.25mg/mL; 13000 dilution of SPC-148 was sufficient for detection of PKBB in 20µg of HeLa cell lysate by ECL immunoblot analysis.
Storage and stability	-20°C; 1 year+; shipped on cold packs or ambient

phosphoinositide-dependent kinase 1 (PDK1) and PDK2 (1-3). Myelin basic protein and histone H2B are *in vitro* substrates for PKB, while glycogen synthase kinase-3 has been implicated as a physiological target (4). Key roles for this enzyme can be found in cellular processes such as glucose metabolism, cell proliferation, apoptosis, transcription and cell migration (1-3).

Selected References

1. Downward J (1998). *Curr Opin Cell Biol.* 10(2): 262-7.
2. Brazil DP, and Hemmings BA (2001). *Biochem Sci.* 26(11):657-64.
3. Nicholson KM, Anderson NG (2002). *Cell Signal.* 14(5): 381-95.
4. Hardie, G., Hanks, S. (1995). *The Protein Kinase Facts Book, Protein-Serine Kinases Academic Press Limited, San Diego, CA 418pps.*

Certificate of Analysis

A 13000 dilution of SPC-148 was sufficient for detection of PKBB in 20µg of HeLa cell lysate by ECL immunoblot analysis.

Scientific Background

Protein kinase B or Akt (PKB/Akt) is a serine/threonine kinase, which in mammals comprises three highly homologous members known as PKB alpha (Akt1), PKB beta (Akt2) and PKB gamma (Akt3). PKB/Akt is a growth-factor-regulated protein kinase which contains a Pleckstrin Homology (PH) domain which might be important for dimerization of the kinase. Binding of phosphoinositide 3-OH kinase products to the pleckstrin homology domain results in translocation of PKB/Akt to the plasma membrane where it is activated by phosphorylation by upstream kinases including the

Material Safety Data Sheet

Anti-Akt2 (PKB β) (Polyclonal Antibody) SPC-148

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The below information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. StressMarq shall not be held liable for any damage resulting from handling or from contact with the above product. See the Technical Specification, Packing Slip, Invoice, and Product Catalogue for additional terms and conditions of sale.

Hazardous Ingredients

The physical, chemical and toxicological properties of these components have not been fully investigated. It is recommended that all laboratory personnel follow standard laboratory safety procedures when handling this product. Safety procedures should include wearing OSHA approved safety glasses, gloves and protective clothing. Direct physical contact with this product should be avoided.

<u>Known Hazardous Components</u>	<u>CAS Number</u>	<u>Percent</u>
Sodium Azide	26628-22-8	0.1

Physical Data

This product consists of rabbit immunoglobulin in Tris buffer containing 0.1% azide shipped on gel packs. The physical properties of this product have not been investigated thoroughly.

Fire and Explosion Hazard and Reactivity Data

NOT APPLICABLE

Toxicological Properties

May be harmful by inhalation, ingestion, or skin absorption. The toxicological properties of this product have not been investigated thoroughly. Exercise due caution.

Preventative Measures

Wear chemical safety goggles and compatible chemical-resistant gloves. Avoid inhalation, contact with eyes, skin or clothing.

Spill and Leak Procedures

Observe all federal, state and local environmental regulations.

- Wear protective equipment.
- Absorb on sand or vermiculite and place in closed containers for disposal.
- Dispose or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

First Aid Measures

- If swallowed, wash out mouth with water, provided person is conscious. Call a physician.
- In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. If a rash or other irritation develops, call a physician.
- If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.
- In case of eye contact, flush with copious amounts of water for at least 15 minutes while separating the eyelids with fingers. Call a physician.

Authorized: StressMarq Biosciences Inc.
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