

Datasheet: MCA6331

BATCH NUMBER 155801

Description:	RABBIT ANTI AKT1 (PH DOMAIN)
Specificity:	AKT1 (PH DOMAIN)
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	RM316
Isotype:	IgG
Quantity:	0.1 ml

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Immunohistology - Paraffin	▪			1/200 - 1/500
Western Blotting	▪			1/5000 - 1/10,000

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species	Human
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography of Protein A from animal origin-free culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative	0.09% Sodium Azide
Stabilisers	1% Bovine Serum Albumin 50% Glycerol
Immunogen	A peptide corresponding to the PH domain of Human AKT1
External Database	UniProt:

Links[P31749](#) [Related reagents](#)**Entrez Gene:**[207](#) AKT1 [Related reagents](#)**Synonyms**

PKB, RAC

Specificity

Rabbit anti Human AKT1 antibody recognizes RAC-alpha serine/threonine-protein kinase, also known as Protein Kinase B alpha, RAC, at its PH domain. The Akt family comprises three serine-threonine kinases, Akt1, Akt2, and Akt3, which play important roles in cell survival and proliferation (Barnett et al. 2005). The PI3K/Akt signaling pathway is activated by growth factors, which in turn activates Akt1, and regulates cell survival during stress (Hemmings and Restuccia et al. 2012). More specifically, Akt1 is activated by phosphorylation at serine 473 and threonine 308 (Balasuriya et al. 2018). Transforming somatic mutations in Akt1 have been reported in a number of tumor types (Jansen et al. 2017). Accordingly, Akt1 is an oncogene that is over-expressed in most human cancers, and is linked to poor survival. Inhibition of Akt1 is therefore of interest for cancer treatment (Balasuriya et al. 2018). The PH domain of Akt1 is a molecular fold comprising 100 - 120 amino acids, found on over 250 human proteins, and capable of protein-protein interactions and affecting Akt1 activity. This antibody recognizes the PH domain of Akt1 (Meuillet. 2014).

Storage

Store at -20°C only.
Storage in frost-free freezers is not recommended.
This product should be stored undiluted. Should this product contain a precipitate we recommend microcentrifugation before use

Guarantee

12 months from date of despatch

Health And Safety Information

Material Safety Datasheet documentation #10048 available at:
<https://www.bio-rad-antibodies.com/SDS/MCA6331>
10048

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

- Sheep Anti Rabbit IgG (STAR34...) [FITC](#)
Goat Anti Rabbit IgG (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)
Sheep Anti Rabbit IgG (STAR35...) [RPE](#)
Goat Anti Rabbit IgG (H/L) (STAR124...) [HRP](#)

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

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