

Datasheet: MCA6331

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 Links	UniProt:

Entrez Gene:

[207](#) AKT1 [Related reagents](#)

Synonyms PKB, RAC

Specificity **Rabbit anti Human AKT1 antibody, clone RM316** 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 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 . 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. Rabbit anti Human AKT1 antibody, clone RM316 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:
10048: <https://www.bio-rad-antibodies.com/uploads/MSDS/10048.pdf>

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

- Sheep Anti Rabbit IgG (STAR34...) [FITC](#)
- Goat Anti Rabbit IgG (H/L) (STAR124...) [HRP](#)
- Sheep Anti Rabbit IgG (STAR35...) [RPE](#)
- Goat Anti Rabbit IgG (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)
- Sheep Anti Rabbit IgG (STAR36...) [DyLight®488](#), [DyLight®680](#), [DyLight®800](#)

North & South America Tel: +1 800 265 7376
Fax: +1 919 878 3751

Email: antibody_sales_us@bio-rad.com

Worldwide

Tel: +44 (0)1865 852 700
Fax: +44 (0)1865 852 739

Email: antibody_sales_uk@bio-rad.com

Europe

Tel: +49 (0) 89 8090 95 21
Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_de@bio-rad.com

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

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