

## Datasheet: MCA6331

<b>Description:</b>	RABBIT ANTI AKT1 (PH DOMAIN)
<b>Specificity:</b>	AKT1 (PH DOMAIN)
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	RM316
<b>Isotype:</b>	IgG
<b>Quantity:</b>	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](http://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.

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

[P31749](#)   [Related reagents](#)

**Entrez Gene:**

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

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**Synonyms**      PKB, RAC

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**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](#)).

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**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

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**Guarantee**      12 months from date of despatch

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

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**Regulatory**      For research purposes only

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## 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](#)

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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](https://bio-rad-antibodies.com/datasheets)  
'M390255:210825'

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