

## Datasheet: MCA6297

<b>Description:</b>	RABBIT ANTI AKT (E17K MUTANT)
<b>Specificity:</b>	AKT (E17K Mutant)
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	RM336
<b>Isotype:</b>	IgG
<b>Quantity:</b>	50 µg

## 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 µg/ml - 0.2 µg/ml
ELISA	▪			0.5 µg/ml - 0.05 µg/ml
Western Blotting	▪			0.5 µg/ml - 0.1 µg/ml

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>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	A peptide corresponding to AKT (E17K mutant)

---

**External Database****Links****UniProt:**[P31749](#)   [Related reagents](#)**Entrez Gene:**[207](#)   AKT1   [Related reagents](#)

---

**Synonyms**

PKB, RAC

---

**Specificity**

**Rabbit anti Human AKT (E17K Mutant) antibody** recognizes the E17K mutated form of RAC-alpha serine/threonine-protein kinase, also known as Protein Kinase B alpha, proto-oncogene c-Akt, RAC. 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](#)). E17K is the most common mutation of Akt1, which activates the Akt1 signaling pathway and transforms cells ([Yi and Lauring 2016](#)).

---

**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](#)Goat Anti Rabbit IgG (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)Sheep Anti Rabbit IgG (STAR35...)   [RPE](#)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](mailto: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](mailto: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](mailto: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://bio-rad-antibodies.com/datasheets)  
'M377114:210212'

**Printed on 23 Mar 2021**

---

© 2021 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)