

Datasheet: HCA308

Description:	HUMAN ANTI AKT1
Specificity:	AKT1
Other names:	PROTEIN KINASE B
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AbD30769
Isotype:	HuCAL Fab bivalent
Quantity:	0.1 mg

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
Western Blotting	■			1/200 - 1/2000

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	A bivalent human recombinant Fab selected from the HuCAL® phage display library, expressed in E. coli. This Fab fragment is dimerized via an inactive variant of the bacterial alkaline phosphatase (BAP) fusion protein. The antibody is tagged with DYKDDDDK and His (HHHHHH) tags.
Preparation	Prepared by affinity chromatography
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.01% Thiomersal
Approx. Protein Concentrations	Antibody concentration 1.0 mg/ml
Immunogen	Recombinant Human AKT1-GST fusion protein
External Database Links	<p>UniProt:</p> <p>P31749 Related reagents</p> <p>Entrez Gene:</p>

Synonyms	PKB, RAC
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Specificity	<p>Human anti AKT1 antibody, clone AbD30769 recognizes AKT1, also known as RAC-alpha serine/threonine-protein kinase, protein kinase B alpha or Proto-oncogene c-Akt. It belongs to the AGC kinase family (Brown and Banerji 2017). AKT activity is regulated downstream of receptor tyrosine kinases (RTKs) (Franke et al. 1995, Brown and Banerji 2017). Its substrates have a consensus phosphorylation motif: R-X-R-X-X-S/T-B (X is any amino acid and B denotes a preference for bulky hydrophobic residues) (Brown and Banerji 2017). A number of AKT substrates have been described including BAD (BCL2 associated agonist of cell death), FOXO (Forkhead Box), MDM2 (MDM2 oncogene), TSC2 (tuberous sclerosis 2), PRAS40 (proline rich Akt substrate), CDKN (cyclin-dependent kinase inhibitor) and GSK3β (glycogen synthase kinase beta) (Manning and Cantley 2007).</p> <p>AKT is frequently activated in cancer (Manning and Toker 2017). In breast cancer, AKT isoforms play different roles during breast cancer progression (Riggio et al. 2017).</p>
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Storage	<p>Store at -20°C only.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
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Guarantee	12 months from date of despatch
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Acknowledgements	<p>Sold under license of U.S. Patents 6753136, 7785859 and 8273688 and corresponding patents. This antibody was developed by Bio-Rad, Zeppelinstr. 4, 82178 Puchheim, Germany. His-tag is a registered trademark of EMD Biosciences.</p>
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Health And Safety Information	<p>Material Safety Datasheet documentation #10162 available at: 10162: https://www.bio-rad-antibodies.com/uploads/MSDS/10162.pdf</p>
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Regulatory	For research purposes only
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Technical Advice	<p>Recommended protocols and further information about HuCAL recombinant antibody technology can be found in the HuCAL Antibodies Technical Manual</p>
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Related Products

Recommended Secondary Antibodies

Human Anti Bacterial ALKALINE PHOSPHATASE (HCA275...) [HRP](#)

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