

## PRODUCT INFORMATION SHEET

### Mouse Monoclonal Antibody to AKT2

Format: PURE      RUO      REF      IQP-1335P      Volume: 0.1ml

 Description	
<b>Clone</b>	1B6
<b>Isotype</b>	Mouse IgG2b
<b>Specificity</b>	AKT2
<b>Alternative names</b>	PKBB; PRKBB; PKBBETA; RAC-BETA
<b>Species</b>	Human, Rat & Monkey
<b>Immunogen</b>	Purified recombinant fragment of human AKT2 expressed in E. Coli.
<b>Mw</b>	60kDa
<b>Format</b>	Ascitic fluid containing 0.03% sodium azide.
<b>Summary</b>	Akt2 (also designated protein kinase B beta or v-akt murine thymoma viral oncogene homolog 2 ), with 481-amino acid protein (about 53kDa), belongs to the AKT serine/threonine protein kinase family, which also includes Akt1 and Akt3. They are involved in a wide variety of biological processes including cell proliferation, differentiation, apoptosis, tumorigenesis, as well as glycogen synthesis and glucose uptake. Among the members of AKT family, Akt2 is associated with the development of human cancers. Akt2 inhibits cisplatin-induced JNK/p38 and Bax activation through phosphorylation of ASK1 and thus, plays an important role in chemoresistance. Further, Akt2 plays a specific role in muscle differentiation.
<b>Applications</b>	Western Blotting: 1/500 - 1/2000.Immunohistochemistry: 1/200 - 1/1000.Immunofluorescence: 1/200 - 1/1000.ELISA: Propose dilution 1/10000.Not yet tested in other applications.Determining optimal working dilutions by titration test.
<b>Limitations</b>	<ol style="list-style-type: none"><li>1. Conjugates with brighter fluorochromes, like PE and APC, will have a greater separation than those with dyes like FITC and CyQ. When populations overlap, the percentage of positive cells using a selected marker can be affected by the choice of fluorescent label.</li><li>2. Use of monoclonal antibodies in patient treatment can interfere with antigen target recognition by this reagent. This should be taken into account when samples are analyzed from patients treated in this fashion. IQ Products has not characterized the effect of the presence of therapeutic antibodies on the performance of this reagent.</li><li>3. Reagents can be used in different combinations, therefore laboratories need to become familiar performance characteristics of each antibody in relation with the combined markers in normal and abnormal samples.</li><li>4. Reagent data performance is based on EDTA-treated blood. Reagent performance can be affected by the use of other anticoagulants.</li></ol>



#### Handling and Storage

Antibodies are supplied in 0.01 M sodium phosphate, 0.15 M NaCl; pH 7.3, 0.03% sodiumazide (NaN<sub>3</sub>) or as ascetic fluid containing 0.03% sodiumazide. Store the vials at 2-8 °C for a maximum of 2 weeks and store at -20°C for longer term storage. Monoclonal antibodies should be protected from prolonged exposure to light when conjugated with fluorochromes. Reagents are stable for the period shown on the vial label when stored properly.

**Warranty** Products sold hereunder are warranted only to conform to the quantity and contents stated on the label at the time of delivery to the customer. There are no warranties, expressed or implied, which extend beyond the description on the label of the product. IQ Products is not liable for property damage, personal injury, or economic loss caused by the product.

#### Characterization

To ensure consistently high-quality reagents, each batch of monoclonal antibody is tested for conformance with characteristics of a standard reagent. Representative flow cytometric data is included in this data sheet.














**Warning** All products contain sodiumazide. This chemical is poisonous and hazardous. Handling should be done by trained staff only.

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**References** 1. Am J Physiol Endocrinol Metab. 2004 Jul;287(1):E8-E15.  
2. Oncol Rep. 2004 Jan;11(1):25-32.  
3. Cancer Res. 2003 Jan 1;63(1):196-206.

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#### Explanation of used symbols

	Consult instructions for use
	Catalogue number
	Sufficient for
	Caution, consult accompanying document
	Keep away from (sun)light
	Biological risks
	Temperature limitation (°C)
	For Research Use Only
	Batch code
	Use by yyyy-mm-dd
	Manufacturer
	Authorized Representative in the European Community
	Conformité Européenne (European Conformity)

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		<b>Label - tandem</b>	<b>Ex -max (nm)</b>	<b>Em -max (nm)</b>
P	PURE	purified material	-	-
F	FITC	FITC	488	519
R	R-PE	PE	488, 532	578
C	CyQ	PE-Cy5.18	488, 532	667
A	APC		595, 633, 635, 647	660
PC	PerCP		488, 532	678
PCC	PerCP-Cy5.5		488, 532	695

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**IQ Products BV**  
Rozenburglaan 13a  
9727 DL Groningen, The Netherlands

 +31 (0)50 57 57 000  
 +31 (0)50 57 57 002  
 Technical [marketing@iqproducts.nl](mailto:marketing@iqproducts.nl)  
 Orders [orders@iqproducts.nl](mailto:orders@iqproducts.nl)  
 [www.iqproducts.nl](http://www.iqproducts.nl)