## AKT1 Monoclonal Mouse Antibody (AKT1/2491)



## **Product Description**

AKT1 is a 62 kDa protein and member of the serine/threonine kinase AKT family. AKT1 is also known as Protein Kinase B (PKB) or Rac Protein Kinase Alpha. The Akt family also includes AKT2. Activation of AKT1 by insulin or insulin-growth factor-1 (IGF-1) results in phosphorylation of both Thr 308 and Ser 473. AKT proteins become phosphorylated and activated in insulin/IGF-1-stimulated cells by an upstream kinase(s), and the activation of AKT1 and AKT2 is inhibited by the PI kinase inhibitor wortmannin.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the CF® Dye Brochure for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

**Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email <a href="mailto:order@biotium.com">order@biotium.com</a> to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 2491, AKT1 Monoclonal Mouse Antibody (AKT1/2491)

## Product attributes

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Product attributes				
research-areas	Apoptosis, Cell cycle, Signal transduction			
Antibody number	#2491			
Antibody reactivity (target)	AKT1			
Antibody type	Primary			
Host species	Mouse			
Clonality	Monoclonal			
Clone	AKT1/2491			
Isotype	IgG2b, kappa			
Molecular weight	62 kDa			
Synonyms	AKT1; PKB; Protein Kinase B Alpha; RAC-alpha serine/threonine-protein kinase			
Human gene symbol	AKT1			
Entrez gene ID	207			
SwissProt	P31749			
Unigene	525622			
Immunogen	Recombinant fragment of human AKT1 protein (around aa 85-189) (exact sequence is proprietary)			
Verified antibody applications	IHC (FFPE) (verified), WB (verified)			
Antibody target cellular localization	Cytoplasmic, Plasma membrane, Nucleus			
Species reactivity	Human			
Positive control	PDGF-treated NIH/3T3 cells. HeLa cell lysates. Human pancreas or cervical carcinoma.			
Shipping condition	Room temperature			
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C			
Regulatory status	For research use only (RUO)			
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide			
Validated in protein array	Monospecific			
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended			
Product origin	Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.			

Email: techsupport@biotium.com

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNC74	CF®740	742/767	633-685	775/50	CF®740 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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