AKT1 Recombinant Monoclonal Mouse Antibody (rAKT1/2491)



Product Description

This antibody recognizes a protein of 62 kDa, which is identified as AKT1. The serine/threonine kinase Akt family contains several members, including Akt1 (also designated PKB or RacPK), Akt2 (also designated PKBbeta or RacPK-beta) and Akt3 (also designated PKB-gamma or thymoma viral proto-oncogene 3), which exhibit sequence homology with the protein kinase A and C families and are encoded by the c-Akt proto-oncogene. All members of the Akt family have a Pleckstrin homology domain. Akt1 and Akt2 are activated by PDGF stimulation. This activation is dependent on PDGFR-beta tyrosine residues 740 and 751, which bind the subunit of the phosphatidylinositol 3-kinase (PI 3-kinase) complex. 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 order@biotium.com to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 3786, AKT1 Recombinant Monoclonal Mouse Antibody (rAKT1/2491)

Product attributes

Call us: 800-304-5357

#3786	
10100	
Apoptosis, Cell cycle, Signal transduction	
AKT1	
Primary	
Mouse	
Recombinant Monoclonal	
AKT1/2491	
gG1, kappa	
62 kDa	
AKT1; PKB; Protein Kinase B Alpha; RAC-alpha serine/threonine-protein kinase	
AKT1	
207	
P31749	
525622	
Recombinant fragment of human AKT1 protein (around aa 35-189) (exact sequence is proprietary)	
HC (FFPE) (verified), WB (verified)	
Cytoplasmic, Plasma membrane, Nucleus	
Human	
PDGF-treated NIH/3T3 cells. HeLa cell lysates. Human pancreas or cervical carcinoma.	
Room temperature	
Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C	
For research use only (RUO)	
onjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP njugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in BS without azide	
Guaranteed for at least 24 months from date of receipt when stored as recommended	
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: btinfo@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	

Alexa Fluor, Pacific Blue, Pacific Orange, and Texas Red are trademarks or registered trademarks of Thermo Fisher Scientific; Cy is a registered trademark of Cytiva; IRDye, LI-COR, and Odyssey are registered trademarks of LI-COR Bioscience.

This datasheet was generated on November 4, 2025 at 10:36:30 PM. Visit product page to check for updated information before use. Product link: https://biotium.com/product/akt1-recombinant-monoclonal-mouse-antibody-rakt1-2491/