

AB-PK521

AMPK α 1-pT183+pS184 Antibody

Phosphosite-specific polyclonal antibody for monitoring the phosphorylation of human protein-serine/threonine kinase AMPK α 1 (PRKAA1)



KINEXUS

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Target Protein

| | |
|---------------------------------------|--|
| Name Long: | 5'-AMP-activated protein kinase catalytic subunit alpha-1 |
| Alias: | 5'-AMP-activated protein kinase, catalytic alpha-1 chain; AAPK1; Acetyl-CoA carboxylase kinase; AMPK alpha-1 chain; AMPK, alpha, 1; AMPK-alpha1; HMG-CoA reductase kinase; HMG-CoA reductase kinase; PRKAA1; Protein kinase, AMP-activated, alpha 1 catalytic subunit; MGC33776; MGC57364; CCDS3932.1; ENSG00000132356 |
| UniProt ID: | Q13131 |
| Sequence Predicted Mass (kDa): | 65.523 (574 AA; Q13131-2); 64.009 (559 AA; Q13131) |
| Observed SDS-PAGE Mass (kDa): | 60-65 |

Immunogen

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|-------------------------------------|--|
| Antibody Immunogen Source: | Human AMPK α 1 (PRKAA1) sequence peptide Cat. No.: PE-04AIG99 |
| Antibody Immunogen Sequence: | FLR(pS)(pT)CG(bA)C (bA) = beta-alanine |
| Location in Target: | Corresponds to amino acid residues F180 to G186; In protein kinase catalytic domain activation T-loop between subdomains VII and VIII. |
| Peptide Type: | For phosphosite-specific recognition of target. |
| Target Phosphosite: | Thr-183+Ser-184 |

Production

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| Antibody Host Species: | Rabbit |
| Antibody Type: | Polyclonal |
| Antibody Ig Isotype Clone Lot: | Immunoglobulin G |
| Production Method: | The immunizing peptide was produced by solid phase synthesis on a multipепptide synthesizer and purified by reverse-phase hplc chromatography. Purity was assessed by analytical hplc and the amino acid sequence confirmed by mass spectrometry analysis. This peptide was coupled to KLH prior to immunization into rabbits. New Zealand White rabbits were subcutaneously injected with KLH-coupled immunizing peptide every 4 weeks for 4 months. The sera from each animal was applied onto an agarose column to which the immunogen peptide was thio-linked. Antibody was eluted from the column with 0.1 M glycine, pH 2.5. Subsequently, the antibody solution was neutralized to pH 7.0 with saturated Tris. This antibody was also subject to negative purification over phosphotyrosine-agarose. |
| Antibody Amount: | 25 μ g |
| Antibody Concentration: | 1 mg/ml |
| Lot Number: | 150305 |
| Storage Buffer: | Phosphate buffered saline (PBS) pH7.4, 0.05% Thimerasol |
| Storage Conditions and Stability: | For long term storage, keep frozen at -40°C or lower. Stock solution can be kept at +4°C for more than 3 months. Avoid repeated freeze-thaw cycles. |

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Applications

| | |
|--|---|
| Product Use: | Western blotting Antibody microarrays |
| Antibody Dilution Recommended: | 2 µg/ml for immunoblotting |
| Antibody Species Reactivity: | Human, mouse, rat and many other mammals |
| Antibody Positive Controls: | Very strong immunoreactivity with immunogen peptide on dot blots. |
| Detection by Immunoblotting in Cell/Tissue Lysates: | Weak immunoreactivity of a target-sized protein by Western blotting in insulin-stimulated MCF7 cells. |
| Overall Antibody Specificity: | Medium selectivity |
| Antibody Cross Reactivities: | No significant cross-reactivities detected in HeLa cells except phenylarsine oxide (PAO) increases detection of a 27 KDa protein; in Jurkat cells, PAO decreases 100 KDa protein and PAO increases 15 KDa protein. This antibody appears to cross-reacts with CDK1 in sea star oocytes. |

This product is for in vitro research use only and is not intended for use in humans or animals.

For more information on our products please visit www.kinexusproducts.ca or contact us at 1-866-KINEXUS(546-3987)