

**Datasheet for 200-406-N98****AKT Antibody Biotin Conjugated****Overview**

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|----------------------|------------------------------------------------------------|
| <b>Description:</b>  | Anti-AKT (RABBIT) Antibody Biotin Conjugated - 200-406-N98 |
| <b>Item No.:</b>     | 200-406-N98                                                |
| <b>Size:</b>         | 100 µg                                                     |
| <b>Applications:</b> | WB                                                         |
| <b>Reactivity:</b>   | Human, Mouse, Rat                                          |
| <b>Host Species:</b> | Rabbit                                                     |

**Product Details**

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| <b>Background:</b>   | AKT is a component of the PI-3 kinase pathway and is activated by phosphorylation at Ser 473 and Thr 308. AKT is a cytoplasmic protein also known as AKT1, Protein Kinase B (PKB) and rac (related to A and C kinases). AKT is a key regulator of many signal transduction pathways. AKT Exhibits tight control over cell proliferation and cell viability. Overexpression or inappropriate activation of AKT is noted in many types of cancer. AKT mediates many of the downstream events of PI 3-kinase (a lipid kinase activated by growth factors, cytokines and insulin). PI 3-kinase recruits AKT to the membrane, where it is activated by PDK1 phosphorylation. Once phosphorylated, AKT dissociates from the membrane and phosphorylates targets in the cytoplasm and the cell nucleus. AKT has two main roles: (i) inhibition of apoptosis; (ii) promotion of proliferation. Anti-AKT Antibody is ideal for investigators involved in Cell Signaling, Cancer, Neuroscience, Signal Transduction research. |
| <b>Synonyms:</b>     | rabbit anti-AKT Antibody Biotin Conjugated, Biotin conjugated rabbit anti-AKT antibody, RAC-PK-alpha, Protein kinase B, PKB, C-AKT, RAC-alpha serine/threonine-protein kinase, Proto-oncogene c-Akt, AKT1 Antibody, AKT2 Antibody, AKT3 Antibody, Biotin, BAC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Host Species:</b> | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Conjugate:</b>    | Biotin                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Format:</b>       | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

**Target Details**

|                   |                  |
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| <b>Gene Name:</b> | AKT1, AKT2, AKT3 |
|-------------------|------------------|

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| <b>Reactivity:</b>         | Human, Mouse, Rat                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Immunogen Type:</b>     | Native Protein                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Immunogen:</b>          | Anti-AKT Pan Reactive Antibody was produced in rabbits by repeated immunizations with a cocktail containing recombinant human AKT1, AKT2, and AKT3 protein isoforms.                                                                                                                                                                                                                                                                                         |
| <b>Purity/Specificity:</b> | AKT Antibody reacts with the AKT from human tissues. Anti-AKT antibody was purified from monospecific antiserum by Protein A chromatography. Based on sequence we expect this antibody to react as well with rat, mouse, and chicken AKT.                                                                                                                                                                                                                    |
| <b>Relevant Links:</b>     | <ul style="list-style-type: none"> <li>• <a href="#">UniProtKB - P31749</a></li> <li>• <a href="#">NCBI - NP_001014431.1</a></li> <li>• <a href="#">GeneID - 207</a></li> <li>• <a href="#">UniProtKB - Q9Y243</a></li> <li>• <a href="#">NCBI - NP_001193658.1</a></li> <li>• <a href="#">GeneID - 10000</a></li> <li>• <a href="#">UniProtKB - P31751</a></li> <li>• <a href="#">NCBI - NP_001617.1</a></li> <li>• <a href="#">GeneID - 208</a></li> </ul> |

## Application Details

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| <b>Tested Applications:</b> | WB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Application Note:</b>    | Biotin Conjugated AKT Antibody is tested for western blotting to detect a single band of the expected apparent molecular weight. This antibody is suitable for immunohistochemistry (Formalin-fixed paraffin-embedded sections), immunofluorescence microscopy using paraformaldehyde-fixed primary cardiomyocyte cultures, immunoprecipitation, transfected cell culture, primary cell culture and ELISA. Researchers should determine optimal titers for applications that are not stated below. |
| <b>Assay Dilutions:</b>     | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>ELISA:</b>               | User Optimized                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>FC:</b>                  | User Optimized                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>IF:</b>                  | User Optimized                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>IHC:</b>                 | 1:500 - 1:2,000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>IP:</b>                  | 1:500 - 1:2,000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>WB:</b>                  | 1:500 - 1:2,000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

## Formulation

|                               |                                                                        |
|-------------------------------|------------------------------------------------------------------------|
| <b>Physical State:</b>        | Lyophilized                                                            |
| <b>Concentration:</b>         | 1 mg/mL by UV absorbance at 280 nm                                     |
| <b>Buffer:</b>                | 0.02 M Potassium Phosphate, 0.5 M Sodium Chloride, pH 7.2              |
| <b>Preservative:</b>          | 0.01% (w/v) Sodium Azide                                               |
| <b>Stabilizer:</b>            | 10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free |
| <b>Reconstitution Volume:</b> | 100 $\mu$ L                                                            |
| <b>Reconstitution Buffer:</b> | Restore with deionized water (or equivalent)                           |

## Shipping & Handling

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| <b>Shipping Condition:</b> | Ambient                                                                                                                                                                                                                                                                                                                                         |
| <b>Storage Condition:</b>  | Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use. |
| <b>Expiration:</b>         | Expiration date is one (1) year from date of receipt.                                                                                                                                                                                                                                                                                           |

## Disclaimer

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