## **Product Datasheet**

# AKT1 [p Thr308] Antibody (18F3.H11) [Biotin] NBP2-21679

Unit Size: 0.05 mg

Store lyophilized antibody at 4C in the dark. Aliquot reconstituted liquid and store at -20C. Avoid freeze-thaw cycles.

www.novusbio.com



technical@novusbio.com

Protocols, Publications, Related Products, Reviews, Research Tools and Images at: www.novusbio.com/NBP2-21679

Updated 10/23/2024 v.20.1

## Earn rewards for product reviews and publications.

Submit a publication at www.novusbio.com/publications
Submit a review at www.novusbio.com/reviews/destination/NBP2-21679



## NBP2-21679

AKT1 [p Thr308] Antibody (18F3.H11) [Biotin]

| AK 11 [p Thr308] Antibody (18F     | -3.H11) [BIOTIN]                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Information                |                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Unit Size                          | 0.05 mg                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Concentration                      | LYOPH mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Storage                            | Store lyophilized antibody at 4C in the dark. Aliquot reconstituted liquid and store at -20C. Avoid freeze-thaw cycles.                                                                                                                                                                                                                                                                                                                      |
| Clonality                          | Monoclonal                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Clone                              | 18F3.H11                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Preservative                       | 0.01% Sodium Azide                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Reconstitution Instructions        | Reconstitute with 50 ul deionized water (or equivalent)                                                                                                                                                                                                                                                                                                                                                                                      |
| Isotype                            | IgG1 Kappa                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Conjugate                          | Biotin                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Purity                             | Protein A purified                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Buffer                             | Lyophilized from 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2, 10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free                                                                                                                                                                                                                                                                                          |
| <b>Product Description</b>         |                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Description                        | Store vial at 4C prior to restoration. For extended storage aliquot contents and freeze at -20C 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 4C as an undiluted liquid. Dilute only prior to immediate use.  This antibody was purified from concentrated tissue culture supernate by Protein A chromatography |
| Host                               | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Gene ID                            | 207                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Gene Symbol                        | AKT1                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Species                            | Human, Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Reactivity Notes                   | A BLAST analysis was used to suggest cross-reactivity with AKT1 pT308 from most vertebrate species sources based on 100% homology with the immunizing sequence. Cross-reactivity with AKT1 from other sources has not been determined. Cross-reactivity with AKT2 and AKT3 will likely occur.                                                                                                                                                |
| Specificity/Sensitivity            | This antibody is specific for human and mouse AKT protein phosphorylated at T308. A BLAST analysis was used to suggest cross-reactivity with AKT pT308 from most vertebrate species sources based on 100% homology with the immunizing sequence. Cross-reactivity with AKT from other sources has not been determined. Cross-reactivity with AKT2 and AKT3 will likely occur.                                                                |
| Immunogen                          | AKT1 [p Thr308] Antibody (18F3.H11) was produced by repeated immunizations with a synthetic peptide corresponding to residues surrounding T308 of human AKT11 protein. (Uniprot: P31749)                                                                                                                                                                                                                                                     |
| <b>Product Application Details</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Applications                       | Western Blot, ELISA, Immunohistochemistry, Immunohistochemistry-Paraffin                                                                                                                                                                                                                                                                                                                                                                     |
| Recommended Dilutions              | Western Blot 1:500 - 1:3000, ELISA 1:20000, Immunohistochemistry 20 ug/mL, Immunohistochemistry-Paraffin 20 ug/mL                                                                                                                                                                                                                                                                                                                            |
| 4                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                              |



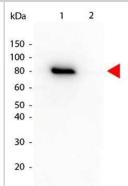
#### **Application Notes**

This product is tested for ELISA, immunohistochemistry, immunoprecipitation and western blotting. Expect a band approximately 56 kDa in size corresponding to phosphorylated AKT protein by western blotting in the appropriate cell lysate or extract. This phospho-specific monoclonal antibody reacts with human and mouse AKT pT308 and shows minimal reactivity by ELISA against the non-phosphorylated form of the immunizing peptide. Specific conditions for reactivity should be optimized by the end user. Use formalin-fixed paraffin-embedded sections for immunohistochemistry. No pre-treatment of sample is required.

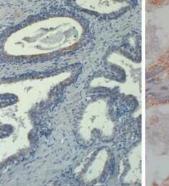


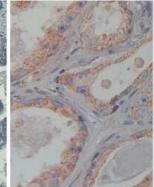
## **Images**

Western Blot: AKT1 [p Thr308] Antibody (18F3.H11) [Biotin] [NBP2-21679] - Lane 1: GST-tagged AKT1 active recombinant protein. Lane 2: GST-tagged AKT1 inactive recombinant protein. Load: 25 ng per lane. AKT1 phospho Thr308 Biotin conjugated antibody at 1:1000 overnight at 4C. Secondary antibody: HRP Streptavidin secondary antibody at 1:40,000 for 30 min at RT. Block for30 min at RT. Predicted/Observed size: 79 kDa, 79 kDa for AKT phospho Thr308.

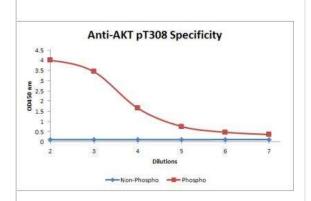


Immunohistochemistry: AKT1 [p Thr308] Antibody (18F3.H11) [Biotin] [NBP2-21679] - IHC-P analysis of FFPE human prostate tissue using AKT1 phospho Thr308 antibody at 20 ug/mL. Left panel: 20X magnification. Right panel: 40X magnification. Heat antigen retrieval in citrate buffer pH 6.2. Secondary antibody: streptavidin-HRP at 10 ug/mL Antibody as precipitated red signal with hemotoxylin purple nuclear counterstain.

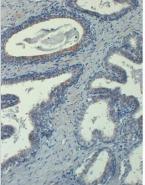


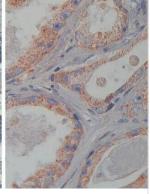


ELISA: AKT1 [p Thr308] Antibody (18F3.H11) [Biotin] [NBP2-21679] - ELISA of AKT1 phospho Thr308 Biotin conjugated antibody. Antigen: Unconjugated AKT1 phospho Thr308 and AKT1 non-phospho Thr308. Coating amount: 0.1 ug per well. Primary antibody: AKT1 phospho Thr308 Biotin conjugated antibody at 5 ug/mL. Dilution series: 3-fold. Mid-point concentration: 5 ng/mL AKT1 phospho Thr308 Biotin conjugated antibody. Secondary antibody: Peroxidase streptavidin secondary antibody at 1:10,000. Substrate: TMB



Immunohistochemistry of Mouse Anti-AKT phospho T308 Biotin Conjugated. Tissue: prostate at 20X (left) and 40X (right). Fixation: FFPE buffered formalin 10% conc. Antigen retrieval: Heat, Citrate pH 6.2. Pressure Cooker, Heat, EDTA pH 9.5 Pressure Cooker. Primary antibody: AKT pT308 biotin at 20 ug/mL for 1 h at RT. Secondary antibody: Streptavidin Conj. HRP at 10 ug/ml. Localization: nuclear and occasionally cytoplasmic. Staining: antibody as precipitated red signal with a hematoxylin purple nuclear counterstain.







## Novus Biologicals USA

10730 E. Briarwood Avenue Centennial, CO 80112

USA

Phone: 303.730.1950 Toll Free: 1.888.506.6887

Fax: 303.730.1966

nb-customerservice@bio-techne.com

### **Bio-Techne Canada**

21 Canmotor Ave Toronto, ON M8Z 4E6

Canada

Phone: 905.827.6400 Toll Free: 855.668.8722 Fax: 905.827.6402

canada.inquires@bio-techne.com

### **Bio-Techne Ltd**

19 Barton Lane Abingdon Science Park Abingdon, OX14 3NB, United Kingdom Phone: (44) (0) 1235 529449

Free Phone: 0800 37 34 15 Fax: (44) (0) 1235 533420 info.EMEA@bio-techne.com

### **General Contact Information**

www.novusbio.com

Technical Support: nb-technical@bio-

techne.com

Orders: nb-customerservice@bio-techne.com

General: novus@novusbio.com

## **Products Related to NBP2-21679**

NBP2-29370 Streptavidin Native Protein

IC002B Mouse IgG1 Isotype Control (11711) [Biotin]

NBP2-52121-0.05mg Recombinant Human AKT1 His Protein

210-TA-005 TNF-alpha [Unconjugated]

#### Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

For more information on our 100% guarantee, please visit www.novusbio.com/guarantee

Earn gift cards/discounts by submitting a review: www.novusbio.com/reviews/submit/NBP2-21679

Earn gift cards/discounts by submitting a publication using this product: www.novusbio.com/publications

