

### 36-2241: Anti-AKT1 (Prognostic Marker for Neuroendocrine Tumors) Monoclonal Antibody(Clone: AKT1/2491)

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	AKT1/2491
<b>Application :</b>	IHC,WB
<b>Reactivity :</b>	Human
<b>Gene :</b>	AKT1
<b>Gene ID :</b>	207
<b>Uniprot ID :</b>	P31749
<b>Alternative Name :</b>	Oncogene AKT1; PKB; PKB-ALPHA; PRKBA; Protein Kinase B Alpha; Proto-oncogene c-Akt; RAC Alpha; RAC Serine/Threonine Protein Kinase; RAC-alpha serine/threonine-protein kinase; RAC-PK-alpha
<b>Isotype :</b>	Mouse IgG2b, kappa
<b>Immunogen Information :</b>	Recombinant fragment of human AKT1 protein (around aa 85-189) (exact sequence is proprietary)

#### Description

Recognizes a protein of 62kDa, which is identified as AKT1. The serine/threonine kinase Akt family contains several members, including Akt1 (also designated PKB or RacPK), Akt2 (also designated PKB 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.

#### Product Info

<b>Amount :</b>	20 µg / 100 µg
<b>Content :</b>	200 µg/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
<b>Storage condition :</b>	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous.

#### Application Note

Western Blot (1-2ug/ml); Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 min at RT)(Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes);

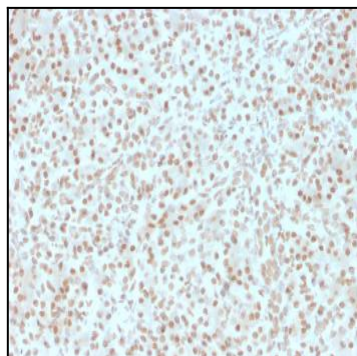


Fig. 1: Formalin-fixed, paraffin-embedded human Pancreas stained with AKT1 Mouse Monoclonal Antibody (AKT1/2491).

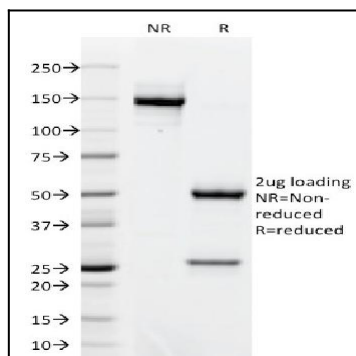


Fig. 2: SDS-PAGE Analysis Purified AKT1 Mouse Monoclonal Antibody (AKT1/2491). Confirmation of Integrity and Purity of Antibody.

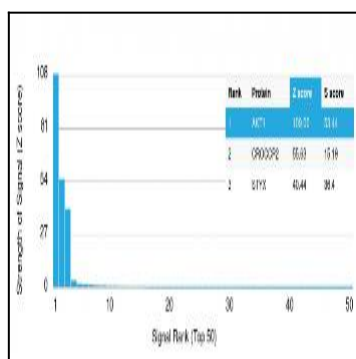


Fig. 3: Analysis of Protein Array containing more than 19,000 full-length human proteins using AKT1 Mouse Monoclonal Antibody (AKT1/2491). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (Monoclonal Antibody) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a Monoclonal Antibody to its intended target. A Monoclonal Antibody is considered to specific to its intended target, if the Monoclonal Antibody has an S-score of at least 2.5. For example, if a Monoclonal Antibody binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that Monoclonal Antibody to protein X is equal to 29.