



## Rabbit Anti-ARK5 antibody

SL6251R

<b>Product Name:</b>	ARK5
<b>Chinese Name:</b>	AMPK的相关蛋白激酶5抗体
<b>Alias:</b>	AMPK related protein kinase 5; NUAK family SNF1 like kinase; NUAK1; Probable serine/threonine protein kinase KIAA0537.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,
<b>Applications:</b>	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	73kDa
<b>Cellular localization:</b>	The nucleuscytoplasmic
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human ARK5:451-550/661
<b>Isotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	ARK5, a novel AMPK family member, is the tumor cell survival factor activated by Akt and acts as an ATM kinase under the conditions of nutrient starvation. It plays a key role in tumor malignancy downstream of Akt. Its overexpression is associated with tumor invasion and metastasis.  <b>Function:</b>

Involved in tolerance to glucose starvation. Phosphorylates ATM. Suppresses Fas-induced apoptosis by phosphorylation of CASP6, thus suppressing the activation of the caspase and the subsequent cleavage of CFLAR.

**Subunit:**

Interact (via GILK motif) with PPP1CB; the interaction is direct and bridges NUAK1 and PPP1R12A.

**Subcellular Location:**

Nucleus. Cytoplasm.

**Tissue Specificity:**

Expressed at high levels in heart and brain, and at lower levels in skeletal muscle, kidney, ovary, placenta, lung and liver.

**Post-translational modifications:**

Ubiquitinated with 'Lys-29'- and 'Lys-33'-linked polyubiquitins which appear to impede LKB1-mediated phosphorylation. Deubiquitinated by USP9X.

Phosphorylated at Thr-211 by STK11/LKB1 in complex with STE20-related adapter-alpha (STRADA) pseudo kinase and CAB39. Not dephosphorylated by the myosin PP1 complex when regulating its activity, due to the presence of PPP1R12A, which prevents myosin PP1 from dephosphorylating NUAK1. Phosphorylated by STK38L upon stimulation with IGF1.

**Similarity:**

Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. SNF1 subfamily.

Contains 1 protein kinase domain.

**SWISS:**

O60285

**Gene ID:**

9891

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.