

**AK3L1 antibody - middle region**  
**Rabbit Polyclonal Antibody**  
**Catalog # AI12098****Specification**

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**AK3L1 antibody - middle region - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">P27144</a>
Other Accession	<a href="#">NM_001005353</a> , <a href="#">NP_001005353</a>
Reactivity	<b>Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Horse, Bovine, Guinea Pig, Dog</b>
Predicted Host	<b>Pig, Dog</b>
Clonality	<b>Rabbit</b>
Calculated MW	<b>Polyclonal</b> <b>25kDa KDa</b>

**AK3L1 antibody - middle region - Additional Information****Gene ID 205**Alias Symbol **AK3, AK4, AK3L1, AK3L2****Other Names**

Adenylate kinase 4, mitochondrial {ECO:0000255|HAMAP-Rule:MF\_03170}, AK 4 {ECO:0000255|HAMAP-Rule:MF\_03170}, 2.7.4.10 {ECO:0000255|HAMAP-Rule:MF\_03170}, 2.7.4.6 {ECO:0000255|HAMAP-Rule:MF\_03170}, Adenylate kinase 3-like {ECO:0000255|HAMAP-Rule:MF\_03170}, GTP:AMP phosphotransferase AK4 {ECO:0000255|HAMAP-Rule:MF\_03170}, AK4 {ECO:0000255|HAMAP-Rule:MF\_03170}

**Format**

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

**Reconstitution & Storage**

Add 100 ul of distilled water. Final anti-AK3L1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

**Precautions**

AK3L1 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

**AK3L1 antibody - middle region - Protein Information****Name** AK4 {ECO:0000255|HAMAP-Rule:MF\_03170}**Function**Involved in maintaining the homeostasis of cellular nucleotides by catalyzing the interconversion of nucleoside phosphates (PubMed: <http://www.uniprot.org/citations/19073142> target="\_blank">19073142</a>, PubMed: <http://www.uniprot.org/citations/19766732> target="\_blank">19766732</a>, PubMed: <http://www.uniprot.org/citations/23416111>)

target="\_blank">23416111</a>, PubMed:<a href="http://www.uniprot.org/citations/24767988" target="\_blank">24767988</a>). Efficiently phosphorylates AMP and dAMP using ATP as phosphate donor, but phosphorylates only AMP when using GTP as phosphate donor (PubMed:<a href="http://www.uniprot.org/citations/19073142" target="\_blank">19073142</a>, PubMed:<a href="http://www.uniprot.org/citations/19766732" target="\_blank">19766732</a>, PubMed:<a href="http://www.uniprot.org/citations/23416111" target="\_blank">23416111</a>). Also displays broad nucleoside diphosphate kinase activity (PubMed:<a href="http://www.uniprot.org/citations/19073142" target="\_blank">19073142</a>, PubMed:<a href="http://www.uniprot.org/citations/19766732" target="\_blank">19766732</a>, PubMed:<a href="http://www.uniprot.org/citations/23416111" target="\_blank">23416111</a>). Plays a role in controlling cellular ATP levels by regulating phosphorylation and activation of the energy sensor protein kinase AMPK (PubMed:<a href="http://www.uniprot.org/citations/24767988" target="\_blank">24767988</a>, PubMed:<a href="http://www.uniprot.org/citations/26980435" target="\_blank">26980435</a>). Plays a protective role in the cellular response to oxidative stress (PubMed:<a href="http://www.uniprot.org/citations/19130895" target="\_blank">19130895</a>, PubMed:<a href="http://www.uniprot.org/citations/23474458" target="\_blank">23474458</a>, PubMed:<a href="http://www.uniprot.org/citations/26980435" target="\_blank">26980435</a>).

### Cellular Location

Mitochondrion matrix {ECO:0000255|HAMAP- Rule:MF\_03170, ECO:0000269|PubMed:11485571, ECO:0000269|PubMed:19766732, ECO:0000269|PubMed:26980435}

### Tissue Location

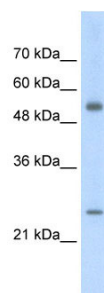
Highly expressed in kidney, moderately expressed in heart and liver and weakly expressed in brain

### AK3L1 antibody - middle region - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### AK3L1 antibody - middle region - Images



WB Suggested Anti-AK3L1 Antibody Titration: 2.5µg/ml

Positive Control: Jurkat cell lysate

### **AK3L1 antibody - middle region - References**

Noma, T., *Biochem. J.* 358(Pt 1), 225-232 (2001) Reconstitution and Storage: For short term use, store at 2-8°C up to 1 week. For long term storage, store at -20°C in small aliquots to prevent freeze-thaw cycles.