10320 Camino Santa Fe, Suite G
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AK6 Polyclonal Antibody
Catalog # AP68341

Specification

AK6 Polyclonal Antibody - Product Information

Application	**WB, IHC-P, IF**
Primary Accession	Q9Y3D8
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**

AK6 Polyclonal Antibody - Additional Information

Gene ID 102157402

Other Names
TAF9; AK6; CINAP; AD-004; CGI-137; Adenylate kinase isoenzyme 6; ATP-AMP transphosphorylase 6; Coilin-interacting nuclear ATPase protein; hCINAP

Dilution
WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.
IHC-P~~N/A
IF~~1:50~200

Format
Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions
-20℃

AK6 Polyclonal Antibody - Protein Information

Name AK6 {ECO:0000255|HAMAP-Rule:MF_03173}

Function
Broad-specificity nucleoside monophosphate (NMP) kinase that catalyzes the reversible transfer of the terminal phosphate group between nucleoside triphosphates and monophosphates. Also has ATPase activity (PubMed:15630091). Involved in the late cytoplasmic maturation steps of the 40S ribosomal particles, specifically 18S rRNA maturation (PubMed:27477389). While NMP activity is not required for ribosome maturation, ATPase activity is. Associates transiently with small ribosomal subunit protein uS11. ATP hydrolysis breaks the interaction with uS11. May temporarily remove uS11 from the ribosome to enable a conformational change of the ribosomal RNA that is needed for the final maturation step of the small ribosomal subunit (By similarity). Its NMP activity may have a role in nuclear energy homeostasis. AMP and dAMP are the preferred substrates, but CMP and dCMP are also good substrates. IMP is phosphorylated to a much lesser

extent. All nucleoside triphosphates ATP, GTP, UTP, CTP, dATP, dCTP, dGTP, and TTP are accepted as phosphate donors. CTP is the best phosphate donor, followed by UTP, ATP, GTP and dCTP. May be involved in regulation of Cajal body (CB) formation (PubMed:15630091).

Cellular Location
Cytoplasm {ECO:0000255|HAMAP-Rule:MF_03173}. Nucleus, nucleoplasm {ECO:0000255|HAMAP-Rule:MF_03173}. Nucleus, Cajal body {ECO:0000255|HAMAP-Rule:MF_03173}. Note=Displays widespread diffuse nucleoplasmic distribution but not detected in nucleoli Detected in Cajal bodies but not in all cells. {ECO:0000255|HAMAP- Rule:MF_03173}

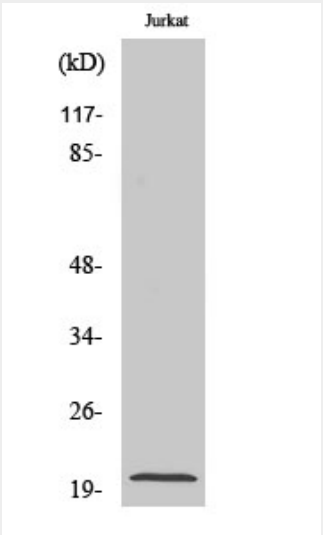
Tissue Location
Expressed in heart, brain, placenta, lung, liver, skeletal muscle, kidney, pancreas, chorionic villi and the central nervous system.

AK6 Polyclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

AK6 Polyclonal Antibody - Images



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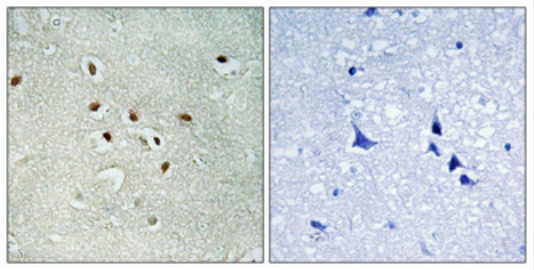

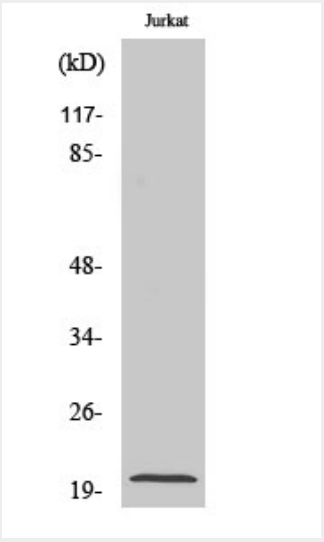

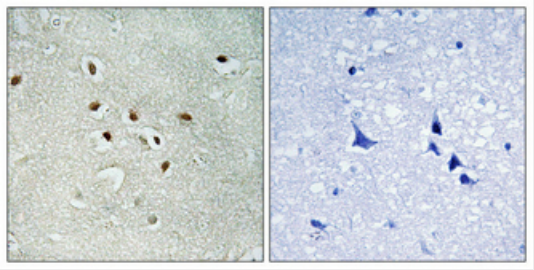

AK6 Polyclonal Antibody - Background

Broad-specificity nucleoside monophosphate (NMP) kinase that catalyzes the reversible transfer of the terminal phosphate group between nucleoside triphosphates and monophosphates. AMP and dAMP are the preferred substrates, but CMP and dCMP are also good substrates. IMP is phosphorylated to a much lesser extent. All nucleoside triphosphates ATP, GTP, UTP, CTP, dATP, dCTP, dGTP, and TTP are accepted as phosphate donors. CTP is the best phosphate donor, followed by UTP, ATP, GTP and dCTP. May have a role in nuclear energy homeostasis. Has also ATPase activity. May be involved in regulation of Cajal body (CB) formation.