

KD-Validated Anti-Adenylate Kinase 1 Mouse Monoclonal Antibody
Mouse monoclonal antibody
Catalog # AGI1790**Specification****KD-Validated Anti-Adenylate Kinase 1 Mouse Monoclonal Antibody - Product Information**

Application	WB, ICC
Primary Accession	P00568
Reactivity	Human
Clonality	Monoclonal
Isotype	Mouse IgG1 kappa
Calculated MW	Predicted, 45 kDa, observed, 44 kDa
Gene Name	AK1
Aliases	AK1; Adenylate Kinase 1; Adenylate Monophosphate Kinase; Adenylate Kinase Isoenzyme 1; ATP-AMP Transphosphorylase 1; ATP:AMP Phosphotransferase; EC 2.7.4.3; Myokinase; Testis Secretory Sperm Binding Protein Li 58j; Epididymis Secretory Sperm Binding Protein; EC 2.7.4.10; EC 2.7.4.6; HTL-S-58j; EC 2.7.4; AK 1
Immunogen	Recombinant protein of human Adenylate Kinase 1

KD-Validated Anti-Adenylate Kinase 1 Mouse Monoclonal Antibody - Additional Information

Gene ID 203

Other Names

Adenylate kinase isoenzyme 1 {ECO:0000255|HAMAP-Rule:MF_03171}, AK 1 {ECO:0000255|HAMAP-Rule:MF_03171}, 2.7.4.3, 2.7.4.4, 2.7.4.6 {ECO:0000255|HAMAP-Rule:MF_03171, ECO:0000269|PubMed:23416111}, ATP-AMP transphosphorylase 1 {ECO:0000255|HAMAP-Rule:MF_03171}, ATP:AMP phosphotransferase {ECO:0000255|HAMAP-Rule:MF_03171}, Adenylate monophosphate kinase {ECO:0000255|HAMAP-Rule:MF_03171}, Myokinase {ECO:0000255|HAMAP-Rule:MF_03171}, AK1 {ECO:0000255|HAMAP-Rule:MF_03171, ECO:0000312|HGNC:HGNC:361}

KD-Validated Anti-Adenylate Kinase 1 Mouse Monoclonal Antibody - Protein Information**Name** AK1 {ECO:0000255|HAMAP-Rule:MF_03171, ECO:0000312|HGNC:HGNC:361}**Function**

Catalyzes the reversible transfer of the terminal phosphate group between ATP and AMP. Also displays broad nucleoside diphosphate kinase activity. Plays an important role in cellular energy homeostasis and in adenine nucleotide metabolism (By similarity) (PubMed:21080915, PubMed:23416111, PubMed:23416111, PubMed:23416111)

href="http://www.uniprot.org/citations/2542324" target="_blank">2542324). Also catalyzes at a very low rate the synthesis of thiamine triphosphate (ThTP) from thiamine diphosphate (ThDP) and ADP (By similarity).

Cellular Location

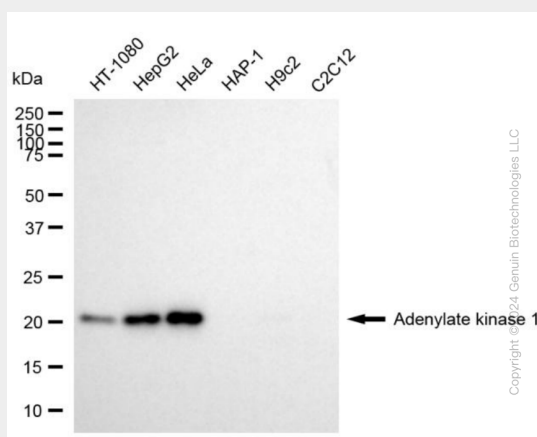
Cytoplasm {ECO:0000250|UniProtKB:P05081}.

KD-Validated Anti-Adenylate Kinase 1 Mouse Monoclonal Antibody - Protocols

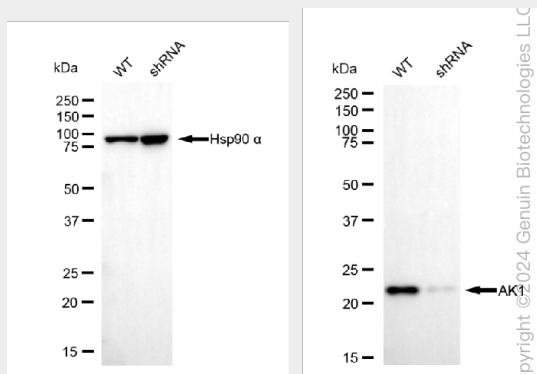
Provided below are standard protocols that you may find useful for product applications.

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

KD-Validated Anti-Adenylate Kinase 1 Mouse Monoclonal Antibody - Images

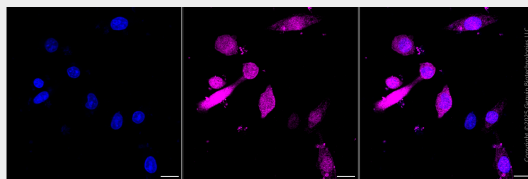


Western blotting analysis using anti-Adenylate kinase 1 antibody (Cat#AGI1790). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Adenylate kinase 1 antibody (Cat#AGI1790, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody respectively.



Western blotting analysis using anti-adenylate kinase 1 antibody (Cat#AGI1790). Adenylate

kinase 1 expression in wild-type (WT) and adenylate kinase 1 (AK1) shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-adenylate kinase 1 antibody (Cat#AGI1790, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody respectively.



Immunocytochemical staining of HepG2 cells with anti-Adenylate kinase 1 antibody (Cat#AGI1790, 1:1,000). Nuclei were stained blue with DAPI; Adenylate kinase 1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 µm.