

KD-Validated Anti-AK3 mouse monoclonal antibody
Mouse monoclonal antibody
Catalog # AGI1963**Specification****KD-Validated Anti-AK3 mouse monoclonal antibody - Product Information**

Application	WB
Primary Accession	Q9UIJ7
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Mouse IgG2a
Calculated MW	Predicted, 26 kDa, observed, 26 kDa kDa
Gene Name	AK3
Aliases	AK3; Adenylate Kinase 3; GTP:AMP Phosphotransferase AK3, Mitochondrial; AKL3L1; AK3L1; AK6; Adenylate Kinase 3 Alpha-Like 1; EC 2.7.4.10; AKL3L; Adenylate Kinase 6, Adenylate Kinase 3 Like 1; GTP:AMP Phosphotransferase, Mitochondrial; Adenylate Kinase 3 Like 1; Adenylate Kinase 6; EC 2.7.4; AK 3; FIX
Immunogen	Recombinant protein of human AK3

KD-Validated Anti-AK3 mouse monoclonal antibody - Additional Information

Gene ID 50808

Other Names

GTP:AMP phosphotransferase AK3, mitochondrial, 2.7.4.10 {ECO:0000255|HAMAP-Rule:MF_03169, ECO:0000269|PubMed:11485571, ECO:0000269|PubMed:32822537}, Adenylate kinase 3 {ECO:0000255|HAMAP-Rule:MF_03169, ECO:0000312|HGNC:HGNC:17376}, Adenylate kinase 3 alpha-like 1 {ECO:0000255|HAMAP-Rule:MF_03169, ECO:0000312|HGNC:HGNC:17376}, Adenylate kinase isozyme 3, AK3 {ECO:0000255|HAMAP-Rule:MF_03169, ECO:0000312|HGNC:HGNC:17376}

KD-Validated Anti-AK3 mouse monoclonal antibody - Protein Information**Name** AK3 {ECO:0000255|HAMAP-Rule:MF_03169, ECO:0000312|HGNC:HGNC:17376}**Function**

Mitochondrial adenylate kinase with a specific GTP:AMP phosphotransferase activity (PubMed:11485571, PubMed:32822537). Could also use ITP as phosphate donor (PubMed:11485571). Its physiological function is to recycle GTP into GDP which is necessary for the TCA cycle in the mitochondrial matrix (Probable).

Cellular Location

Mitochondrion matrix {ECO:0000255|HAMAP-Rule:MF_03169, ECO:0000269|PubMed:11485571}

Tissue Location

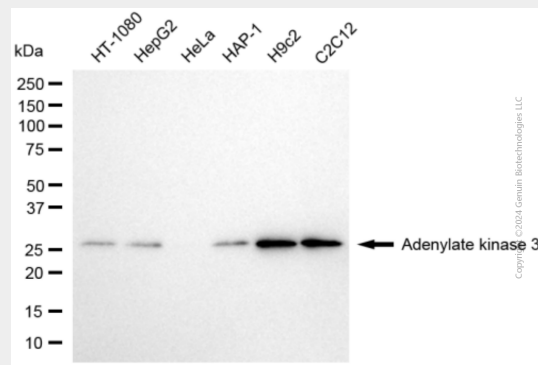
Highly expressed in heart, skeletal muscle and liver, moderately expressed in pancreas and kidney, and weakly expressed in placenta, brain and lung.

KD-Validated Anti-AK3 mouse monoclonal antibody - Protocols

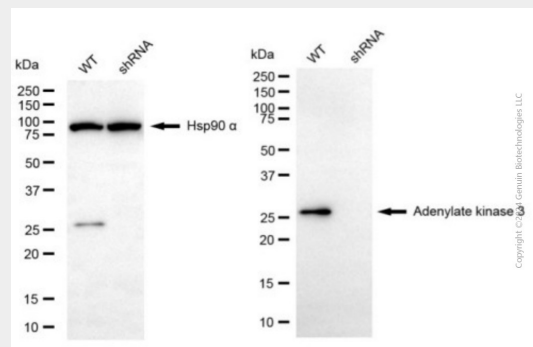
Provided below are standard protocols that you may find useful for product applications.

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

KD-Validated Anti-AK3 mouse monoclonal antibody - Images



Western blotting analysis using anti-adenylate kinase 3 antibody (Cat#AGI1963). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-adenylate kinase 3 antibody (Cat#AGI1963, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody respectively.



Western blotting analysis using anti-adenylate kinase 3 antibody (Cat#AGI1963). Adenylate kinase 3 expression in wild type (WT) and adenylate kinase 3 (AK3) 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 3 antibody (Cat#AGI1963, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody respectively.