

Zebrafish ak2 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21667a

Product Information

Application WB, IHC-P, FC, E

Primary Accession

Reactivity

Clonality

Isotype

Clone Names

Calculated MW

Q1L8L9

Zebrafish

Rabbit

polyclonal

Rabbit IgG

RB53220

26616

Additional Information

Gene ID 321793

Other Names Adenylate kinase 2, mitochondrial {ECO:0000255 | HAMAP-Rule:MF_03168}, AK

2 {ECO:0000255 | HAMAP-Rule:MF_03168}, 2743

{ECO:0000255 | HAMAP-Rule:MF_03168}, ATP-AMP transphosphorylase 2 {ECO:0000255 | HAMAP-Rule:MF_03168}, ATP:AMP phosphotransferase {ECO:0000255 | HAMAP-Rule:MF_03168}, Adenylate monophosphate kinase

{ECO:0000255 | HAMAP-Rule:MF_03168}, ak2

Target/Specificity This Zebrafish ak2 antibody is generated from a rabbit immunized with a KLH

conjugated synthetic peptide between 3~39 amino acids from the N-terminal

region of Zebrafish ak2.

Dilution WB~~1:2000 IHC-P~~1:100~500 FC~~1:25 E~~Use at an assay dependent

concentration.

Format Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is purified through a protein A column, followed by peptide

affinity purification.

Storage Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions Zebrafish ak2 Antibody (N-term) is for research use only and not for use in

diagnostic or therapeutic procedures.

Protein Information

Name ak2

Function

Catalyzes the reversible transfer of the terminal phosphate group between ATP and AMP. Plays an important role in cellular energy homeostasis and in adenine nucleotide metabolism. Adenylate kinase activity is critical for regulation of the phosphate utilization and the AMP de novo biosynthesis pathways. Plays a key role in hematopoiesis.

Cellular Location

Mitochondrion intermembrane space {ECO:0000255 | HAMAP-Rule:MF_03168}

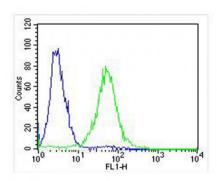
Background

Catalyzes the reversible transfer of the terminal phosphate group between ATP and AMP. Plays an important role in cellular energy homeostasis and in adenine nucleotide metabolism. Adenylate kinase activity is critical for regulation of the phosphate utilization and the AMP de novo biosynthesis pathways. Plays a key role in hematopoiesis.

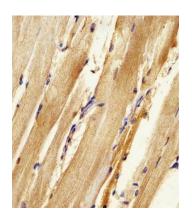
References

Howe K., et al. Nature 496:498-503(2013). Pannicke U., et al. Nat. Genet. 41:101-105(2009).

Images

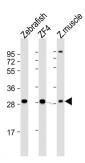


Overlay histogram showing ZF4 cells stained with AP21667a (green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP21667a, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(OH191631) at 1/400 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.



AP21667a staining Zebrafish ak2 in zebra fish body tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.

All lanes: Anti-Zebrafish ak2 Antibody (N-term) at 1:2000 dilution Lane 1: Zebrafish lysate Lane 2: ZF4 whole cell lysate Lane 3: Zebrafish muscle lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 27 kDa Blocking/Dilution buffer: 5%



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.