

ATAD3A Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP59147

Specification

ATAD3A Polyclonal Antibody - Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	O9NV17
Reactivity	Rat, Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	71369

ATAD3A Polyclonal Antibody - Additional Information

Gene ID 55210

Other Names

ATPase family AAA domain-containing protein 3A {ECO:0000312|HGNC:HGNC:25567}, ATAD3A (http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=25567)
[HGNC:25567](#))

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

ATAD3A Polyclonal Antibody - Protein Information

Name ATAD3A {ECO:0000303|PubMed:37832546, ECO:0000312|HGNC:HGNC:25567}

Function

Essential for mitochondrial network organization, mitochondrial metabolism and cell growth at organism and cellular level (PubMed: [17210950](http://www.uniprot.org/citations/17210950), PubMed: [20154147](http://www.uniprot.org/citations/20154147), PubMed: [22453275](http://www.uniprot.org/citations/22453275), PubMed: [31522117](http://www.uniprot.org/citations/31522117), PubMed: [37832546](http://www.uniprot.org/citations/37832546), PubMed: [39116259](http://www.uniprot.org/citations/39116259)). May play an important role in mitochondrial protein synthesis (PubMed: [22453275](http://www.uniprot.org/citations/22453275)). May also participate in mitochondrial DNA replication (PubMed: [17210950](http://www.uniprot.org/citations/17210950)). May bind to mitochondrial DNA D-loops and contribute to nucleoid stability (PubMed: [17210950](http://www.uniprot.org/citations/17210950)). Required for enhanced channeling of cholesterol for hormone-dependent steroidogenesis (PubMed: [17210950](http://www.uniprot.org/citations/17210950)).

[22453275](http://www.uniprot.org/citations/22453275)). Involved in mitochondrial-mediated antiviral innate immunity (PubMed:[31522117](http://www.uniprot.org/citations/31522117)). Required to protect mitochondria from the PERK-mediated unfolded protein response: specifically inhibits the activity of EIF2AK3/PERK at mitochondria-endoplasmic reticulum contact sites, thereby providing a safe haven for mitochondrial protein translation during endoplasmic reticulum stress (PubMed:[39116259](http://www.uniprot.org/citations/39116259)). Ability to inhibit EIF2AK3/PERK is independent of its ATPase activity (PubMed:[39116259](http://www.uniprot.org/citations/39116259)). Also involved in the mitochondrial DNA damage response by promoting signaling between damaged genomes and the mitochondrial membrane, leading to activation of the integrated stress response (ISR) (PubMed:[37832546](http://www.uniprot.org/citations/37832546)).

Cellular Location

Mitochondrion inner membrane; Single-pass membrane protein. Mitochondrion matrix, mitochondrion nucleoid Note=In the mitochondrial inner membrane, enriched in sites with the potential to form contacts with the outer membrane (PubMed:20154147, PubMed:20349121). The N-terminal domain interacts with the inner surface of the mitochondrial outer membrane and the C-terminal domain localizes in a specific matrix compartment, where it is associated with nucleoids (PubMed:18063578). Also present at mitochondria-endoplasmic reticulum contact sites; where it interacts with EIF2AK3/PERK (PubMed:39116259).

Tissue Location

Overexpressed in lung adenocarcinomas (at protein level).

ATAD3A 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 Cytometry](#)
- [Cell Culture](#)

ATAD3A Polyclonal Antibody - Images