

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	Q9NV17
Reactivity	Rat, Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	66218

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)
target="_blank">HGNC:25567)

Dilution

WB~~1:1000<br \>IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>E~~N/A

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, PubMed:20154147, PubMed:22453275, PubMed:31522117, PubMed:37832546, PubMed:39116259). May play an important role in mitochondrial protein synthesis

(PubMed:22453275). May also participate in mitochondrial DNA replication (PubMed:17210950). May bind to mitochondrial DNA D-loops and contribute to nucleoid stability (PubMed:17210950). Required for enhanced channeling of cholesterol for hormone-dependent steroidogenesis (PubMed:22453275). Involved in mitochondrial-mediated antiviral innate immunity (PubMed: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). Ability to inhibit EIF2AK3/PERK is independent of its ATPase activity (PubMed: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).

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