

Aprataxin Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP54283

Specification

Aprataxin Polyclonal Antibody - Product Information

Application IHC-P, IHC-F, IF, ICC

Primary Accession
Reactivity
Rat
Host
Clonality
Calculated MW

Q7Z2E3
Rabbit
Rabbit
Polyclonal
40740

Aprataxin Polyclonal Antibody - Additional Information

Gene ID 54840

Other Names

Aprataxin, 3.6.1.71, 3.6.1.72, Forkhead-associated domain histidine triad-like protein, FHA-HIT, APTX, AXA1

Format

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

Storage

Store at -20 $^{\circ}$ 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 $^{\circ}$ C.

Aprataxin Polyclonal Antibody - Protein Information

Name APTX

Synonyms AXA1

Function

DNA-binding protein involved in single-strand DNA break repair, double-strand DNA break repair and base excision repair (PubMed:15380105, PubMed:15044383, PubMed:16964241, PubMed:17276982, PubMed:24362567). Resolves abortive DNA ligation intermediates formed either at base excision sites, or when DNA ligases attempt to repair non-ligatable breaks induced by reactive oxygen species (PubMed:16964241, PubMed:24362567). Catalyzes the release of adenylate groups covalently linked to 5'-phosphate termini, resulting in the production of 5'-phosphate termini that can be efficiently rejoined (PubMed:<a href="http://www.uniprot.org/citations/16964241"



target="_blank">16964241, PubMed:17276982, PubMed:24362567). Also able to hydrolyze adenosine 5'-monophosphoramidate (AMP-NH(2)) and diadenosine tetraphosphate (AppppA), but with lower catalytic activity (PubMed:16547001). Likewise, catalyzes the release of 3'-linked guanosine (DNAppG) and inosine (DNAppI) from DNA, but has higher specific activity with 5'-linked adenosine (AppDNA) (By similarity).

Cellular Location

Nucleus, nucleoplasm. Nucleus, nucleolus Note=Upon genotoxic stress, colocalizes with XRCC1 at sites of DNA damage (PubMed:15380105). Colocalizes with MDC1 at sites of DNA double- strand breaks (PubMed:20008512). Interaction with NCL is required for nucleolar localization (PubMed:16777843).

Tissue Location

Widely expressed; detected in liver, kidney and lymph node (at protein level) (PubMed:14755728). Isoform 1 is highly expressed in the cerebral cortex and cerebellum, compared to isoform 2 (at protein level) (PubMed:14755728). Widely expressed; detected throughout the brain, in liver, kidney, skeletal muscle, fibroblasts, lymphocytes and pancreas (PubMed:15276230, PubMed:11586299, PubMed:11586300).

Aprataxin Polyclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Aprataxin Polyclonal Antibody - Images