

FHIT Antibody
Rabbit mAb
Catalog # AP92428

Specification

FHIT Antibody - Product Information

Application	WB
Primary Accession	P49789
Reactivity	Rat
Clonality	Monoclonal
Other Names	
AP3A hydrolase; AP3Aase; Dinucleosidetriphosphatase; FRA3B;	
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	16858 Da

FHIT Antibody - Additional Information

Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human FHIT
Description	FHIT (fragile histidine triad) cleaves adenosine 5' PPP 5' A to yield AMP and ADP. Alterations and deletions of the FHIT gene are strongly linked to the genesis and establishment of human tumors of the lung, cervix, breast, colon, stomach and pancreas. In normal cells, FHIT may act as a tumor suppressor. FHIT physically associates with ubiquitin conjugating enzyme 9.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

FHIT Antibody - Protein Information

Name FHIT

Function

Possesses dinucleoside triphosphate hydrolase activity (PubMed:12574506, PubMed:15182206, PubMed:8794732, PubMed:9323207, PubMed:9543008, PubMed:9576908). Cleaves P(1)-P(3)-bis(5'-adenosyl) triphosphate (Ap3A) to yield AMP and ADP (PubMed:12574506, PubMed:15182206, PubMed:8794732, PubMed:9323207, PubMed:9543008, PubMed:9576908). Can also hydrolyze P(1)-P(4)-bis(5'-adenosyl) tetraphosphate (Ap4A), but has extremely low activity with ATP (PubMed:8794732). Exhibits adenylsulfatase activity, hydrolyzing adenosine 5'-phosphosulfate to yield AMP and sulfate (PubMed:18694747). Exhibits adenosine 5'-monophosphoramidase activity, hydrolyzing purine nucleotide phosphoramidates with a single phosphate group such as adenosine 5' monophosphoramidate (AMP-NH₂) to yield AMP and NH₂ (PubMed:18694747). Exhibits adenylsulfate-ammonia adenyltransferase, catalyzing the ammonolysis of adenosine 5'- phosphosulfate resulting in the formation of adenosine 5'- phosphoramidate (PubMed:26181368). Also catalyzes the ammonolysis of adenosine 5-phosphorofluoridate and diadenosine triphosphate (PubMed:26181368). Modulates transcriptional activation by CTNNB1 and thereby contributes to regulate the expression of genes essential for cell proliferation and survival, such as CCND1 and BIRC5 (PubMed:18077326). Plays a role in the induction of apoptosis via SRC and AKT1 signaling pathways (PubMed:16407838). Inhibits MDM2-mediated proteasomal degradation of p53/TP53 and thereby plays a role in p53/TP53-mediated apoptosis (PubMed:15313915). Induction of apoptosis depends on the ability of FHIT to bind P(1)-P(3)-bis(5'-adenosyl) triphosphate or related compounds, but does not require its catalytic activity, it may in part come from the mitochondrial form, which sensitizes the low-affinity Ca(2+) transporters, enhancing mitochondrial calcium uptake (PubMed:12574506, PubMed:19622739). Functions as a tumor suppressor (By similarity).

Cellular Location

Cytoplasm. Mitochondrion. Nucleus

Tissue Location

Low levels expressed in all tissues tested. Phospho-FHIT observed in liver and kidney, but not in brain and lung Phospho-FHIT undetected in all tested human tumor cell lines

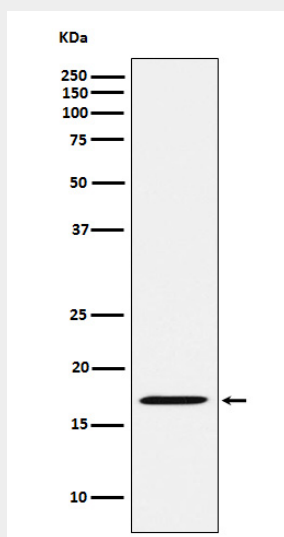
FHIT Antibody - Protocols

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](#)

FHIT Antibody - Images



Western blot analysis of FHIT expression in Rat kidney lysate.