

Anti-FHIT Rabbit Monoclonal Antibody

Catalog # ABO15847

Product Information

Application	WB
Primary Accession	P49789
Host	Rabbit
Isotype	IgG
Reactivity	Rat, Human
Clonality	Monoclonal
Format	Liquid
Description	Anti-FHIT Rabbit Monoclonal Antibody . Tested in WB application. This antibody reacts with Human, Rat.

Additional Information

Gene ID	2272
Other Names	Bis(5'-adenosyl)-triphosphatase, 3.6.1.29, AP3A hydrolase, AP3Aase, Adenosine 5'-monophosphoramidase FHIT, 3.9.1.-, Adenylylsulfatase, 3.6.2.1, Adenylylsulfate-ammonia adenylyltransferase, 2.7.7.51, Diadenosine 5', 5'''-P1, P3-triphosphate hydrolase, Dinucleosidetriphosphatase, Fragile histidine triad protein, FHIT
Calculated MW	16858
Application Details	WB 1:500-1:2000
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: 24F24
Immunogen	A synthesized peptide derived from human FHIT
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

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 adenylylsulfatase 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 adenylylsulfate-ammonia adenylyltransferase, 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).

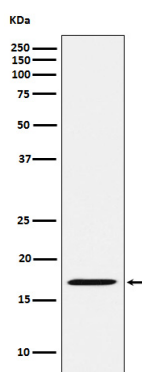
Cellular Location

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

Images



Western blot analysis of FHIT expression in Rat kidney lysate.

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