

## FHIT Antibody

Catalog No: #33374

Package Size: #33374-1 50ul #33374-2 100ul

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## Description

Product Name	FHIT Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Applications	WB IHC IF
Species Reactivity	Hu
Specificity	The antibody detects endogenous levels of total FHIT protein.
Immunogen Type	Peptide
Immunogen Description	Synthesized peptide derived from human FHIT.
Target Name	FHIT
Other Names	AP3Aase; FRA3B; bis(5'-adenosyl)-triphosphatase; inucleosidetriphosphatase; AP3A HYDROLASE FRAGILE SITE 3p14.2
Accession No.	Swiss-Prot: P49789NCBI Gene ID: 2272
SDS-PAGE MW	16kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

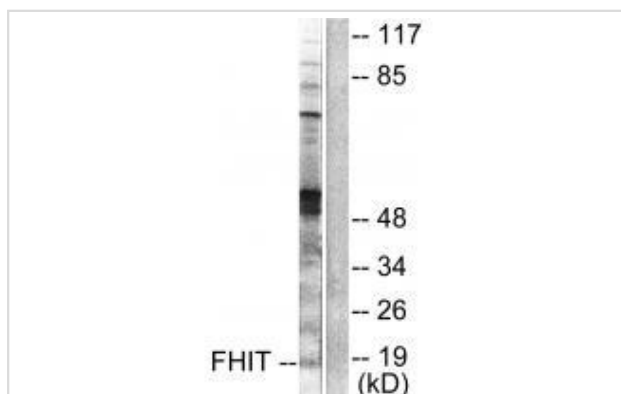
## Application Details

Western blotting: 1:500~1:3000

Immunohistochemistry: 1:50~1:100

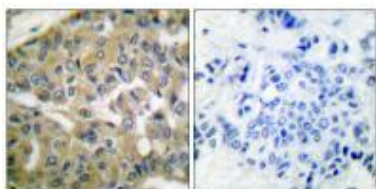
Immunofluorescence: 1:100~1:500

## Images



Western blot analysis of extracts from A549 cells, using FHIT antibody #33374.

Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using FHIT antibody #33374.



Immunofluorescence analysis of A549 cells, using FHIT antibody #33374.



## Background

Cleaves P(1)-P(3)-bis(5'-adenosyl) triphosphate (Ap3A) to yield AMP and ADP. Can also hydrolyze P(1)-P(4)-bis(5'-adenosyl) tetraphosphate (Ap4A), but has extremely low activity with ATP. 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. Plays a role in the induction of apoptosis via SRC and AKT1 signaling pathways. Inhibits MDM2-mediated proteasomal degradation of p53/TP53 and thereby plays a role in p53/TP53-mediated apoptosis. 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<sup>2+</sup> transporters, enhancing mitochondrial calcium uptake. Functions as tumor suppressor.

Hideshi Ishii, *Cancer Res.*, Dec 2006; 66: 11287 - 11292.

Francesca Bianchi, *PNAS*, Dec 2006; 103: 18981 - 18986.

Koshi Mimori, *Cancer Res.*, Mar 2006; 66: 2683 - 2690.

Tamotsu Kuroki, *Cancer Res.*, Jul 2003; 63: 3724 - 3728.

Note: This product is for in vitro research use only and is not intended for use in humans or animals.