

## **Fhit Polyclonal Antibody**

Catalog No: YT1704

**Reactivity:** Human; Rat; Mouse;

**Applications:** WB;IHC;IF;ELISA

Target: Fhit

Fields: >>Purine metabolism;>>Metabolic pathways;>>Small cell lung cancer;>>Non-

small cell lung cancer

Gene Name: FHIT

**Protein Name :** Bis(5'-adenosyl)-triphosphatase

P49789

O89106

Human Gene Id: 2272

**Human Swiss Prot** 

No:

**Mouse Swiss Prot** 

No:

**Immunogen:** The antiserum was produced against synthesized peptide derived from human

FHIT. AA range:81-130

**Specificity:** Fhit Polyclonal Antibody detects endogenous levels of Fhit protein.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution:** WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:10000. Not

yet tested in other applications.

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

1/4



**Storage Stability:** -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 16kD

Cell Pathway: Purine metabolism; Small cell lung cancer; Non-small cell lung cancer;

**Background:** This gene, a member of the histidine triad gene family, encodes a diadenosine

5',5'''-P1,P3-triphosphate hydrolase involved in purine metabolism. The gene encompasses the common fragile site FRA3B on chromosome 3, where carcinogen-induced damage can lead to translocations and aberrant transcripts of this gene. In fact, aberrant transcripts from this gene have been found in about half of all esophageal, stomach, and colon carcinomas. Alternatively spliced transcript variants have been found for this gene. [provided

by RefSeq, Oct 2009],

**Function :** catalytic activity:P(1)-P(3)-bis(5'-adenosyl) triphosphate + H(2)O = ADP +

AMP., cofactor: Divalent cations. Magnesium, but manganese and to a lesser

extent calcium or cobalt can be substituted; but not zinc, cadmium or

nickel.,disease:A chromosomal aberration involving FHIT is observed in early

onset bilateral and multifocal clear cell renal carcinoma [MIM:144700].

Translocation t(3;8) (3p14.2)., disease: Associated with digestive tract cancers. Numerous tumor types are found to have aberrant forms of FHIT protein due to deletions in a coding region of chromosome 3p14.2 including the fragile site locus FRA3B., function: Cleaves A-5'-PPP-5'A to yield AMP and ADP. Possible tumor

suppressor for specific tissues., mass spectrometry:

PubMed:15007172,similarity:Contains 1 HIT domain.,subunit:Homodimer.,tissue specificity:Low levels expressed in all tissues tested. Phospho-FHIT observed in

liver and

Subcellular Location:

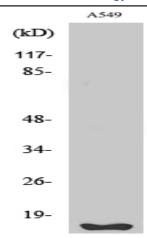
Cytoplasm . Mitochondrion . Nucleus .

**Expression:** 

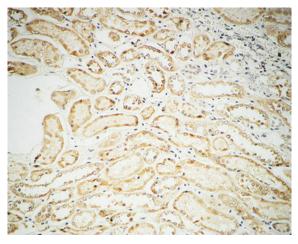
Low levels expressed in all tissues tested. Phospho-FHIT observed in liver and kidney, but not in brain and lung. Phospho-FHIT undetected in all tested human

tumor cell lines.

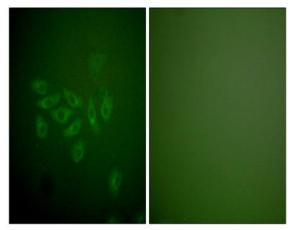
## **Products Images**



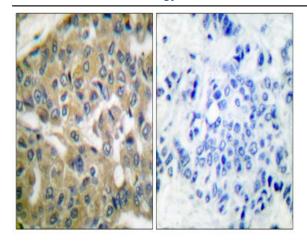
Western Blot analysis of various cells using Fhit Polyclonal Antibody



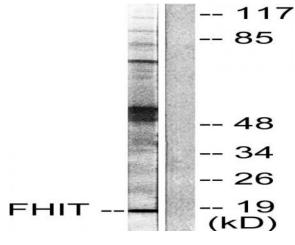
Immunohistochemical analysis of paraffin-embedded Human kidney. 1, Antibody was diluted at 1:100(4° overnight). 2, Highpressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).



Immunofluorescence analysis of A549 cells, using FHIT Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using FHIT Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from A549 cells, using FHIT Antibody. The lane on the right is blocked with the synthesized peptide.