

# Product datasheet

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ARG58006 anti-FHIT antibody Package: 50 μg Store at: -20°C

### **Summary**

**Product Description** Rabbit Polyclonal antibody recognizes FHIT

**Tested Reactivity** Hu **Predict Reactivity** Ms

ICC/IF, WB **Tested Application** Host Rabbit

Polyclonal Clonality

Isotype IgG **Target Name** FHIT

**Species** Human

Immunogen Synthetic peptide corresponding to 18 aa (C-terminus) of Human FHIT.

Conjugation Un-conjugated

FRA3B; AP3Aase; Bis(5'-adenosyl)-triphosphatase; EC 3.6.1.29; AP3A hydrolase; AP3Aase; Diadenosine **Alternate Names** 

5',5"'-P1,P3-triphosphate hydrolase; Dinucleosidetriphosphatase; Fragile histidine triad protein

# **Application Instructions**

Application table	Application	Dilution
	ICC/IF	5 μg/ml
	WB	1 - 2 μg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	WB: HeLa cell lysate.	
Observed Size	15 kDa	

# **Properties**

Form Liquid

Purification Affinity purification with immunogen.

**Buffer** PBS and 0.02% Sodium azide.

Preservative 0.02% Sodium azide

Concentration 1 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated

freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

#### Bioinformation

Gene Symbol

FHIT

Gene Full Name

fragile histidine triad

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** 

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(2+) transporters, enhancing mitochondrial calcium uptake. Functions as tumor suppressor. [UniProt]

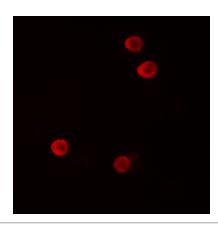
Calculated Mw

17 kDa

PTM

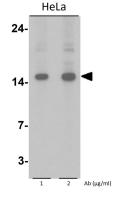
Phosphorylation at Tyr-114 by SRC is required for induction of apoptosis. [UniProt]

# **Images**



### ARG58006 anti-FHIT antibody ICC/IF image

Immunofluorescence: HeLa cells stained with ARG58006 anti-FHIT antibody at 5  $\mu g/ml$  dilution.



### ARG58006 anti-FHIT antibody WB image

Western blot: HeLa cell lysate stained with ARG58006 anti-FHIT antibody at (A) 1 and (B) 2  $\mu g/ml$  dilution.