



Product Datasheet

Product Name	FHIT Human Recombinant
Cata No	CB500918
Source	<i>Escherichia Coli.</i>
Synonyms	Bis(5'-adenosyl)-triphosphatase, EC 3.6.1.29, Diadenosine 5',5'''-P1,P3-triphosphate hydrolase, Dinucleosidetriphosphatase, AP3A hydrolase, AP3Aase, Fragile histidine triad protein, FHIT, FRA3B.

Description

FHIT is a member of the histidine triad gene family. FHIT gene encodes a diadenosine 5',5'''-P1,P3-triphosphate hydrolase involved in purine metabolism. FHIT gene includes the common fragile site FRA3B on chromosome 3, where carcinogen-induced damage can lead to translocations and abnormal transcripts of this gene. The FHIT protein is a tumor suppressor with reduced or no expression in numerous types of cancer. FHIT may also act as a tumor suppressor in normal cells. Alterations and deletions of the FHIT (Fragile Histidine Triad) gene are strongly linked to the genesis and establishment of human tumors of the lung, cervix, breast, colon, stomach, and pancreas. The expression of FHIT is more often lost in cancers of individuals with familial mutations causing deficiency in DNA repair genes such as BRCA1, BRCA2 and MSH2. In vitro FHIT functions as a hydrolase that cleaves diadenosine triphosphate (Ap3A) to ADP and AMP. The FHIT -Ap3A enzyme-substrate complex seems to be the tumor suppressor signal. The restoration of FHIT expression in FHIT -deficient cancer cells leads to apoptosis, involving the intrinsic caspase pathway,

in cancer-derived cells and in tumor xenografts.

FHIT Human Recombinant full length protein expressed in E.coli, shows a 43 kDa band on SDS-PAGE.

The FHIT is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile Filtered clear solution.

Formulation

FHIT at 100µg/ml in 50mM Tris-Acetate, pH7.5, 1mM EDTA and 20% Glycerol.

Stability

Store vial at -20°C to -80°C. When stored at the recommended temperature, this protein is stable for 12 months.

Please prevent freeze-thaw cycles.

Applications

- ELISA
- Inhibition Assays
- Western Blotting

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