



Fhit (phospho Tyr114) Polyclonal Antibody

Catalog No	YP-Ab-00243
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	IHC;IF;ELISA
Gene Name	FHIT
Protein Name	Bis(5'-adenosyl)-triphosphatase
Immunogen	The antiserum was produced against synthesized peptide derived from human FHIT around the phosphorylation site of Tyr114. AA range:80-129
Specificity	Phospho-Fhit (Y114) Polyclonal Antibody detects endogenous levels of Fhit protein only when phosphorylated at Y114.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	IHC: 1/100 - 1/300. ELISA: 1/40000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	FHIT; Bis(5'-adenosyl)-triphosphatase; AP3A hydrolase; AP3Aase; Diadenosine 5'; 5'''-P1,P3-triphosphate hydrolase; Dinucleosidetriphosphatase; Fragile histidine triad protein
Observed Band	
Cell Pathway	Cytoplasm . Mitochondrion . Nucleus .
Tissue Specificity	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.
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

Background

This gene, a member of the histidine triad gene family, encodes a diadenosine 5' and 3',5'-bisphosphate 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],

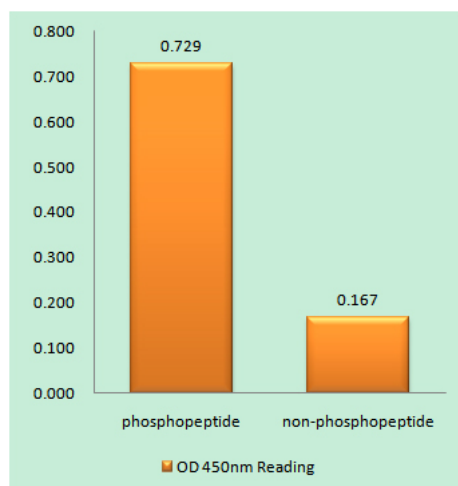
matters needing attention

Avoid repeated freezing and thawing!

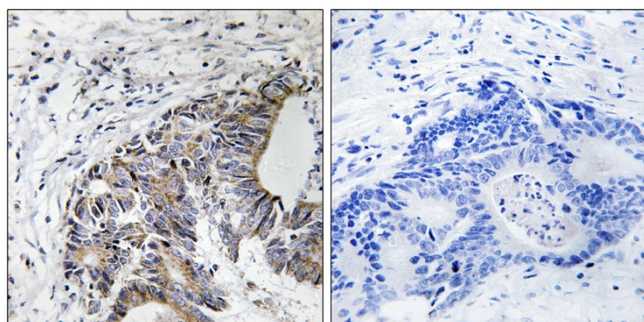
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using FHIT (Phospho-Tyr114) Antibody



Immunohistochemistry analysis of paraffin-embedded human colon carcinoma, using FHIT (Phospho-Tyr114) Antibody. The picture on the right is blocked with the phosphopeptide.