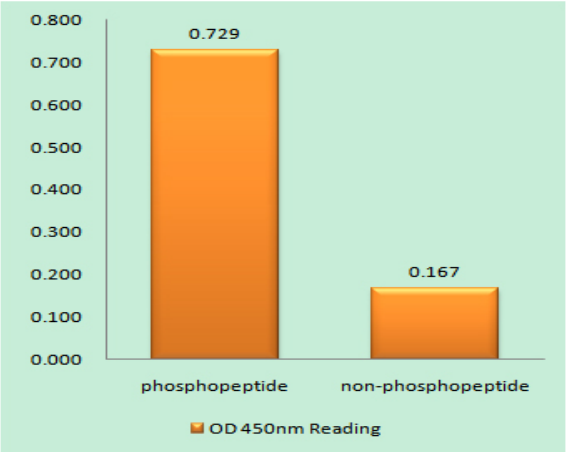
Best Tools for immunology Research

Fhit (phospho Tyr114) Polyclonal Antibody

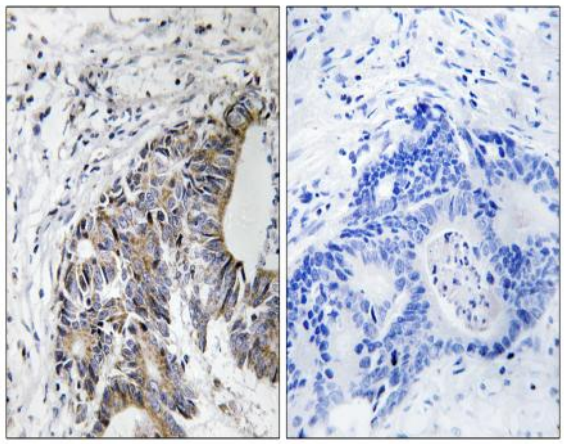
Catalog No :	YP1114
Reactivity :	Human;Rat;Mouse;
Applications :	IHC;IF;ELISA
Target :	Fhit
Fields :	>>Purine metabolism;>>Metabolic pathways;>>Small cell lung cancer;>>Non-small cell lung cancer
Gene Name :	FHIT
Protein Name :	Bis(5'-adenosyl)-triphosphatase
Human Gene Id :	2272
Human Swiss Prot No :	P49789
Mouse Swiss Prot No :	O89106
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
Dilution :	IHC 1:100 - 1:300. ELISA: 1:40000.. IF 1:50-200
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml

Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Molecularweight :	17kD
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



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 phospho peptide.