EPIGENTEK
Complete Solutions for Epigenetics

USA Tel: 1-877-374-4368 • Int. Tel: 1-718-484-3990
sales@epigentek.com • www.epigentek.com

NUDT5 Polyclonal Antibody

(Catalog # A70331)

Background
Enzyme that can either act as an ADP-sugar pyrophosphatase in absence of diphosphate or catalyze the synthesis of ATP in presence of diphosphate. In absence of diphosphate, hydrolyzes with similar activities various modified nucleoside diphosphates such as ADP-ribose, ADP-mannose, ADP-glucose, 8-oxo-GDP and 8-oxo-dGDP. Can also hydrolyze other nucleotide sugars with low activity. In presence of diphosphate, mediates the synthesis of ATP in the nucleus by catalyzing the conversion of ADP-ribose to ATP and ribose 5-phosphate. Nuclear ATP synthesis takes place when dephosphorylated at Thr-45. Nuclear ATP generation is required for extensive chromatin remodeling events that are energy-consuming. Does not play a role in U8 snoRNA decapping activity. Binds U8 snoRNA.

Description
NUDT5 Polyclonal Antibody. Unconjugated. Raised in: Rabbit.

Formulation
0.03% Proclin 300, 50% Glycerol, 0.01M PBS, pH 7.4

Specificity
Human

Isotype
IgG

Uniprot ID
Q9UKK9

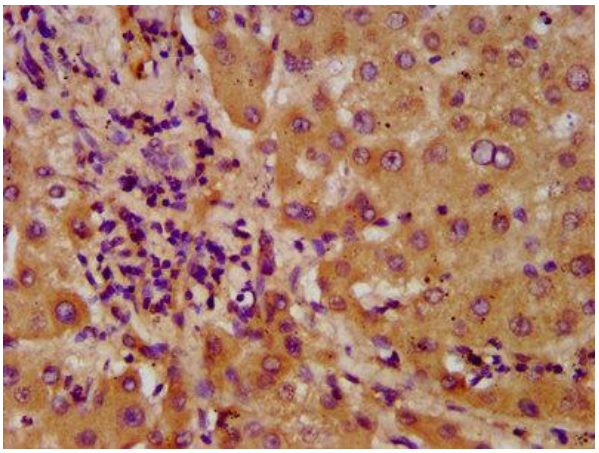
Purification
Protein G purified

Immunogen
Recombinant Human ADP-sugar pyrophosphatase protein (34-166AA)

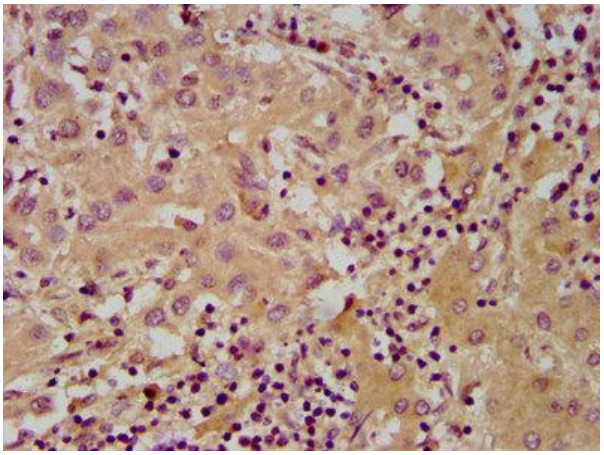
Storage
Shipped at 4°C. Upon receipt, store at -20°C (short-term) or -80°C (long-term). Avoid repeated freeze.

Alternative Names
ADP-sugar pyrophosphatase, 8-oxo-dGDP phosphatase, NUDT5, NUDIX51 Publication

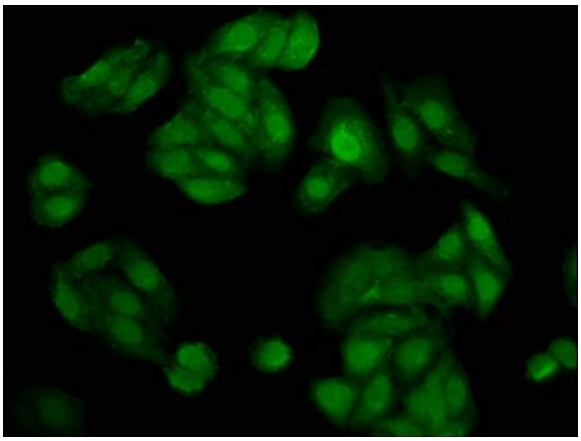
Application
ELISA, IHC, IF; Recommended dilution: IHC:1:500-1:1000, IF:1:200-1:500



IHC image of NUDT5 Polyclonal Antibody diluted at 1:600 and staining in paraffin-embedded human liver tissue performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



IHC image of NUDT5 Polyclonal Antibody diluted at 1:600 and staining in paraffin-embedded human liver cancer performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



Immunofluorescence staining of HepG2 cells with NUDT5 Polyclonal Antibody at 1:200, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeabilized using 0.2% Triton X-100 and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. The secondary antibody was Alexa Fluor 488-congugated AffiniPure Goat Anti-Rabbit IgG (H+L).