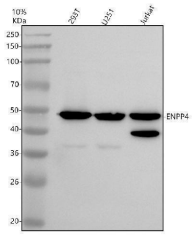
ENPP4 Antibody / Bis(5'-adenosyl)-triphosphatase ENPP4 Antibody (FY13645)

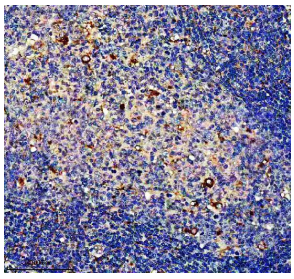
Catalog No.	Formulation	Size
FY13645	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

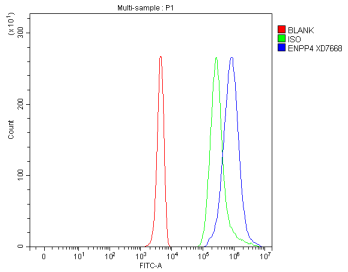
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	Q9Y6X5
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Flow cytometry: 1-3ug/million cells ELISA: 0.1-0.5 ug/ml
Limitations	The ENPP4 Antibody / Bis(5'-adenosyl)-triphosphatase ENPP4 Antibody is available for research use only.



ENPP4 Antibody by WB in human cell lines. Western blot analysis using Bis(5'-adenosyl)-triphosphatase ENPP4 Antibody detects a prominent band at approximately 47-50 kDa in three human cell lysates. Lane 1 contains HEK293T cells, lane 2 contains U251 cells, and lane 3 contains Jurkat cells. The principal band migrates at a similar apparent molecular weight across the samples. An additional lower band is visible in the Jurkat lane, but its identity is not established. The figure includes molecular weight markers to support assessment of apparent band size.



ENPP4 Antibody by IHC in human tonsil tissue. Immunohistochemistry analysis of ENPP4 expression in a paraffin-embedded section of human tonsil tissue using ENPP4 Antibody. Heat-mediated antigen retrieval was performed with EDTA buffer (pH 8.0), followed by blocking with 10% goat serum. The tissue was incubated overnight at 4oC with the primary antibody at 2 ug/ml. A peroxidase-conjugated goat anti-rabbit IgG secondary antibody was applied, and immunoreactivity was visualized using DAB chromogen.



ENPP4 Antibody by FCM in fixed HEK293T cells. Flow cytometry analysis using Bis(5'-adenosyl)-triphosphatase ENPP4 Antibody shows a rightward shift in fluorescence for the antibody-stained population (blue) compared with the isotype control (green) and unstained blank (red). The histogram illustrates ENPP4-associated immunoreactivity in fixed HEK293T cells. This result should not be interpreted as demonstrating surface staining of live cells.

Description

ENPP4 Antibody / Bis(5'-adenosyl)-triphosphatase ENPP4 Antibody recognizes an extracellular enzyme in the ectonucleotide pyrophosphatase/phosphodiesterase family. ENPP4 has been characterized for its ability to hydrolyze diadenosine polyphosphates, including diadenosine triphosphate, which are nucleotide derivatives containing two adenosine groups linked by a phosphate chain. These molecules can act as extracellular signals, so their breakdown provides a means of regulating the local nucleotide environment.

Diadenosine polyphosphates may be released from cells under particular physiological conditions and can influence purinergic signaling through interactions with nucleotide-responsive pathways. Their concentrations depend on both release and enzymatic clearance. ENPP4 catalyzes phosphodiester bond cleavage in suitable substrates, converting signaling-active nucleotide derivatives into smaller products that can undergo further metabolism. Its activity is one part of a wider extracellular enzyme network that includes other ENPP proteins, nucleotidases, and phosphatases.

The ENPP family illustrates substantial diversification in substrate preference despite shared catalytic features. ENPP1 is extensively studied in nucleotide metabolism and mineralization, while ENPP7 is primarily associated with sphingomyelin hydrolysis. ENPP4 is distinguished by its activity toward selected dinucleoside polyphosphates. This diversity makes it important to evaluate enzyme-specific substrates rather than assuming that all ENPP proteins have interchangeable roles.

Extracellular nucleotide metabolism can affect vascular, inflammatory, and intercellular communication pathways, although the precise physiological contribution of ENPP4 in individual tissues remains an active area of study. Local enzyme distribution, substrate supply, and the presence of other nucleotide-processing proteins are likely to shape its effects. NSJ Bioreagents offers this ENPP4 Antibody to support investigation of diadenosine polyphosphate turnover and the regulation of extracellular nucleotide signals. Establishing when and where ENPP4 controls these metabolites may clarify how enzymatic nucleotide clearance influences communication between neighboring cells.

Explore related research targets in our Metabolism Antibody / Metabolism Antibodies collection.

Application Notes

An appropriate dilution of the ENPP4 Antibody / Bis(5'-adenosyl)-triphosphatase ENPP4 Antibody should be determined empirically before routine use.

Immunogen

The ENPP4 Antibody was generated using e. coli-derived human ENPP4 recombinant protein (amino acids E186-G453).

Storage

The ENPP4 Antibody is stable for up to one month at 4oC after reconstitution. For longer-term storage, aliquot and store at -20oC for up to six months. Do not repeatedly freeze and thaw.

Alternate Names

ENPP4 antibody, Bis(5'-adenosyl)-triphosphatase ENPP4 antibody, ectonucleotide pyrophosphatase/phosphodiesterase 4 antibody, E NPP 4 antibody, KIAA0879 antibody, ENPP4 rabbit polyclonal antibody

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