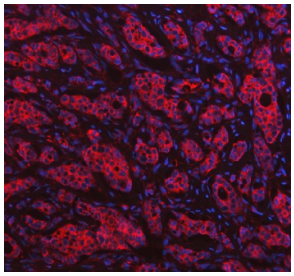
HGPRTase Antibody / HPRT1 (RQ8055)

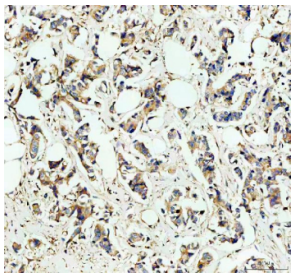
Catalog No.	Formulation	Size
RQ8055	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

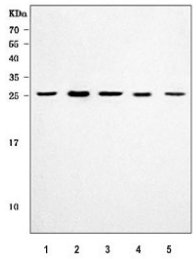
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P00492
Localization	Cytoplasm
Applications	Western blot: 0.5-1ug/ml Flow cytometry: 1-3ug/million cells Immunohistochemistry (FFPE): 2-5ug/ml Immunofluorescence: 5ug/ml Direct ELISA: 0.1-0.5ug/ml
Limitations	This HGPRTase antibody is available for research use only.



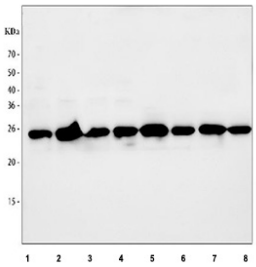
Immunofluorescent staining of FFPE human breast cancer tissue with HGPRTase antibody (red) and DAPI nuclear stain (blue). HIER: steam section in pH8 EDTA buffer for 20 min.



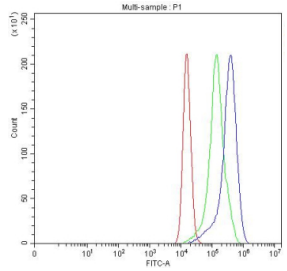
IHC staining of FFPE human breast cancer tissue with HGPRTase antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of 1) human HeLa, 2) human 293T, 3) human Jurkat, 4) rat brain and 5) mouse brain tissue lysate with HGPRTase antibody. Predicted molecular weight ~24 kDa.



Western blot testing of 1) human HeLa, 2) human 293T, 3) human A549, 4) human MCF7, 5) rat brain, 6) rat C6, 7) mouse brain and 8) mouse NIH 3T3 cell lysate with HGPRTase antibody. Predicted molecular weight ~24 kDa.



Flow cytometry testing of fixed and permeabilized human A549 cells with HGPRTase antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= HGPRTase antibody.

Description

HGPRTase (Hypoxanthine-guanine phosphoribosyltransferase, HPRT1) is a purine salvage enzyme that catalyzes the conversion of hypoxanthine to inosine monophosphate (IMP) and guanine to guanosine monophosphate (GMP) using phosphoribosyl pyrophosphate (PRPP) as a substrate. This reaction conserves energy by recycling purine bases into usable nucleotides, supporting DNA and RNA synthesis without the need for de novo purine biosynthesis.

HGPRTase is ubiquitously expressed in human tissues and is essential for maintaining balanced nucleotide pools. It plays a particularly important role in cells with high nucleic acid turnover, such as lymphocytes and neuronal cells. The enzyme is widely studied in research focused on nucleotide metabolism, purine salvage pathways, and enzymatic regulation of biosynthetic flux.

The **HGPRTase antibody** enables specific detection of endogenous HGPRT in applications such as western blot, immunohistochemistry, and immunofluorescence. Researchers use the HGPRTase antibody from NSJ Bioreagents to quantify expression levels, examine tissue distribution, and study the enzymeÃ¢Â€Â™s regulation under various metabolic conditions. With high specificity and consistent performance, the HGPRTase antibody supports detailed investigations into purine metabolism and nucleotide homeostasis.

Application Notes

Optimal dilution of the HGPRTase antibody should be determined by the researcher.

Immunogen

E. coli-derived recombinant human protein (amino acids Y17-K186) was used as the immunogen for the HGPRTase antibody.

Storage

After reconstitution, the HGPRTase antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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