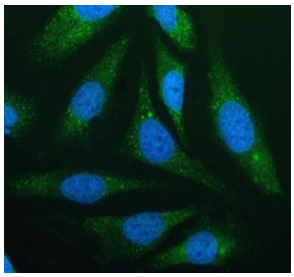
NAPRT Antibody / NAD Salvage Pathway Enzyme Antibody (RQ8246)

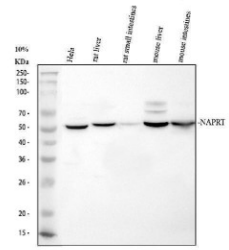
Catalog No.	Formulation	Size
RQ8246	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

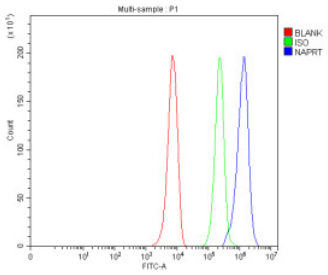
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q6XQN6
Applications	Western blot: 0.5-1ug/ml Immunofluorescence: 5ug/ml Flow cytometry: 1-3ug/million cells Direct ELISA: 0.1-0.5ug/ml
Limitations	This NAPRT Antibody / NAD Salvage Pathway Enzyme Antibody is available for research use only.



NAPRT Antibody HeLa Cell IF. Immunofluorescence analysis of NAPRT Antibody / NAD Salvage Pathway Enzyme Antibody in HeLa cells. Cells were subjected to enzyme antigen retrieval, stained with NAPRT antibody at 5 ug/ml and detected with a Fluoro594-conjugated secondary antibody. Nuclei were counterstained with DAPI (blue). NAPRT staining is observed predominantly within the cytoplasm with punctate intracellular distribution, consistent with its role as a metabolic enzyme involved in NAD biosynthesis through the Preiss-Handler pathway. This NAPRT Antibody, a NAD Salvage Pathway Enzyme Antibody, is suitable for investigating NAPRT expression, subcellular localization and cellular NAD metabolism by immunofluorescence.



NAPRT Antibody Human, Rat and Mouse WB. Western blot analysis of NAPRT Antibody / NAD Salvage Pathway Enzyme Antibody detected endogenous NAPRT in cell and tissue lysates. Lane 1: human HeLa cells; Lane 2: rat liver; Lane 3: rat small intestine; Lane 4: mouse liver; Lane 5: mouse small intestine. A rabbit polyclonal NAPRT antibody was used at 0.5 ug/ml. A specific band is detected at approximately 58 kDa, consistent with the predicted molecular weight of NAPRT. This NAPRT Antibody, a NAD Salvage Pathway Enzyme Antibody, demonstrates cross-species reactivity and is suitable for studies of NAD biosynthesis, nicotinic acid metabolism and cellular bioenergetics.



NAPRT Antibody HepG2 Cell FACS. Flow cytometry analysis of NAPRT Antibody / NAD Salvage Pathway Enzyme Antibody in fixed and permeabilized HepG2 cells. Cells were stained with NAPRT antibody at 1 ug/10^6 cells, followed by a Fluoro488-conjugated secondary antibody. The blue histogram represents NAPRT staining, the green histogram is the rabbit IgG isotype control and the red histogram is the unstained control. A clear rightward shift of the NAPRT signal relative to both controls demonstrates specific intracellular detection of endogenous NAPRT. This NAPRT Antibody, a NAD Salvage Pathway Enzyme Antibody, is suitable for flow cytometric analysis of NAD biosynthesis and metabolic enzyme expression.

Description

NAPRT Antibody / NAD Salvage Pathway Enzyme Antibody recognizes nicotinate phosphoribosyltransferase (NAPRT), a key enzyme in the Preiss-Handler pathway responsible for NAD biosynthesis from nicotinic acid (vitamin B3). NAPRT catalyzes the conversion of nicotinic acid to nicotinic acid mononucleotide, an essential intermediate in the production of nicotinamide adenine dinucleotide (NAD). As a central regulator of cellular NAD homeostasis, NAPRT supports numerous metabolic processes including energy production, DNA repair, oxidative stress responses and cellular signaling. Because NAD metabolism is fundamental to cell survival and proliferation, NAPRT has become an important target in studies of metabolism, aging and cancer biology. NSJ Bioreagents provides NAPRT antibodies for researchers investigating NAD biosynthesis and metabolic regulation.

NAPRT is expressed in many normal tissues but exhibits variable expression among different tumor types, making it an important biomarker in cancer research. Tumors that express high levels of NAPRT can utilize nicotinic acid to maintain intracellular NAD pools, whereas NAPRT-deficient cancers may depend more heavily on alternative NAD biosynthetic pathways. This metabolic distinction has generated significant interest in NAPRT as a predictive biomarker for therapies targeting nicotinamide phosphoribosyltransferase (NAMPT) and related components of NAD metabolism. Accordingly, NAPRT Antibody reagents are widely used to evaluate protein expression in studies of metabolic vulnerabilities and therapeutic response.

Beyond oncology, NAPRT contributes to normal cellular metabolism by maintaining adequate NAD levels required for mitochondrial function, redox balance and the activity of NAD-dependent enzymes such as sirtuins and poly(ADP-ribose) polymerases. Altered NAPRT expression has been investigated in inflammatory disorders, neurobiology and age-related diseases, where disturbances in NAD metabolism can influence tissue function and cellular resilience. As interest in NAD biology continues to expand, NAPRT remains an important molecular target for understanding metabolic adaptation and cellular homeostasis.

An NAPRT Antibody is a valuable reagent for detecting this NAD salvage pathway enzyme by Western blotting, immunohistochemistry, immunofluorescence, flow cytometry and related immunoassays. By enabling reliable analysis of protein expression and localization, an NAPRT Antibody supports investigations into NAD biosynthesis, nicotinic acid metabolism, cellular bioenergetics and metabolic disease.

Researchers studying cellular metabolism and bioenergetics may also be interested in our Metabolism Research Antibodies page, featuring antibodies against proteins involved in metabolic regulation, energy homeostasis and

biosynthetic pathways.

Application Notes

Optimal dilution of the NAPRT Antibody / NAD Salvage Pathway Enzyme Antibody should be determined by the researcher.

Immunogen

E. coli-derived recombinant human protein (amino acids A69-Q480) was used as the immunogen for the NAPRT antibody.

Storage

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

Alternate Names

NAPRT antibody, Nicotinate Phosphoribosyltransferase antibody, Nicotinic Acid Phosphoribosyltransferase antibody

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