

A21047

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Coenzyme NAD Rabbit mAb

Catalog No.: A21047

Recombinant

Basic Information

Observed MW

Refer to figures

Calculated MW

Category

Small Molecule-specific Antibody

Applications

ELISA,DB

Cross-Reactivity

Species independent

CloneNo number

ARC51050

Background

The coenzyme NAD is involved in oxidation–reduction reactions critical for glycolysis, fatty acid oxidation, the TCA cycle, and complex I of the mitochondrial respiratory chain and also is a key regulator of autophagy. At least two different mechanisms are involved. First, the NAD⁺-dependent deacetylase SIRT1 activates autophagy by directly deacetylating ATG proteins. Under starvation conditions, the increased NAD⁺/NADH ratio activates SIRT1, which results in stimulation of mitophagy. Second, the hydrogen of NADH can be transferred to NADP⁺ to form NADPH via the energy-linked transhydrogenase. In the fed state, when the NAD⁺/NADH ratio falls, NADPH inhibits autophagy by scavenging of ROS via the glutathione peroxidase-glutathione reductase system and by preventing the production of ROS at complex 1 of the respiratory chain.

Recommended Dilutions

DB 1:500 - 1:1000

ELISA Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

Immunogen Information

Gene ID

CAS:53-84-9

Swiss Prot

Immunogen

Chemical compounds corresponding to Coenzyme.

Synonyms

Contact

 www.abclonal.com

Product Information

Source

Rabbit

Isotype

IgG

Purification

Affinity purification

Storage

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.05% proclin300,0.05% BSA,50% glycerol,pH7.3.

Validation Data

	NAD	dATP	dTTP	dCTP	dGTP	m6A-8	m6A-9
1uM							
10uM							

The Coenzyme NAD Rabbit mAb (A21047) are tested in Dot Blot against NAD and deoxynucleotide,adenosine. m6A 8 - ATAACTGG-m6A-CCGAATGG m6A 9 - ATAACTGGACCGAATGG