

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<sup>+</sup>-dependent deacetylase SIRT1 activates autophagy by directly deacetylating ATG proteins. Under starvation conditions, the increased NAD<sup>+</sup>/NADH ratio activates SIRT1, which results in stimulation of mitophagy. Second, the hydrogen of NADH can be transferred to NADP<sup>+</sup> to form NADPH via the energy-linked transhydrogenase. In the fed state, when the NAD<sup>+</sup>/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 I of the respiratory chain.

### Recommended Dilutions

DB 1:500 - 1:1000

### Immunogen Information

#### Gene ID

CAS:53-84-9

#### Swiss Prot

#### Immunogen

NAD

#### Synonyms

### Contact



[www.abclonal.com](http://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