

## CAB21047

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### Product Information

<b>Product SKU:</b>	CAB21047	<b>Gene ID:</b>	CAS:53-84-9	<b>Size:</b>	20uL, 100uL
<b>Clone No:</b>	ARC51050	<b>Host Species:</b>	Rabbit	<b>Reactivity:</b>	Species independent

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### Additional Information

<b>Observed MW:</b>	Refer to figures	<b>Conjugate:</b>	Unconjugated
<b>Calculated MW:</b>	-	<b>Isotype:</b>	IgG

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### Immunogen Information

**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 1 of the respiratory chain.

**Recommended Dilution:** DB,1:500 - 1:1000

**Synonyms:** -

**Purification Method:** Affinity purification

**Immunogen:** NAD

**Storage:** Store at -20°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.05% proclin300,0.05% BSA,50% glycerol,pH7.3.