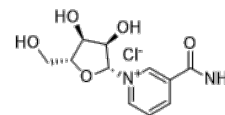


**Product Name** : Nicotinamide riboside  
**Cat. No.** : PC-23870  
**CAS No.** : 23111-00-4  
**Molecular Formula** : C<sub>11</sub>H<sub>15</sub>ClN<sub>2</sub>O<sub>5</sub>  
**Molecular Weight** : 290.70  
**Target** : Sirtuin  
**Solubility** : 10 mM in DMSO



## Biological Activity

Nicotinamide riboside (NR) is an orally active NAD<sup>+</sup> precursor, increases NAD<sup>+</sup> levels and activates SIRT1 and SIRT3, promotes peroxisome proliferator-activated receptor- $\gamma$  coactivator 1 (PGC)-1 $\alpha$  expression in the brain.

Nicotinamide riboside supplementation in mammalian cells and mouse tissues increases NAD(+) levels and activates SIRT1 and SIRT3, culminating in enhanced oxidative metabolism and protection against high-fat diet-induced metabolic abnormalities.

Nicotinamide riboside regulates  $\beta$ -secretase 1 degradation and mitochondrial gene expression in Alzheimer's mouse models.

## References

Cantó C, et al. Cell Metab. 2012 Jun 6;15(6):838-47.

Bing Gong, et al. Neurobiol Aging. 2013 Jun;34(6):1581-8.

**Caution: Product has not been fully validated for medical applications. Lab Use Only!**

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