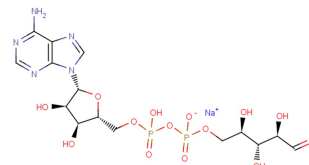


## Adenosine 5'-diphosphoribose sodium

## Chemical Properties

CAS No.:	68414-18-6
Formula:	C <sub>15</sub> H <sub>22</sub> N <sub>5</sub> NaO <sub>14</sub> P <sub>2</sub>
Molecular Weight:	581.3
Appearance:	N/A
Storage:	0-4°C for short term (days to weeks), or -20°C for long term (months).



## Biological Description

Description	Adenosine 5'-diphosphoribose sodium (ADP ribose sodium) is a NAD <sup>+</sup> metabolite. It is the most potent and primary intracellular Ca <sup>2+</sup> -permeable cation TRPM2 channel activator. It also can enhance autophagy.
Targets(IC <sub>50</sub> )	Autophagy: None
In vitro	In mouse embryonic fibroblasts (MEFs), H <sub>2</sub> O <sub>2</sub> treatment demonstrates that the activation of PARP-1 produced Adenosine 5'-diphosphoribose (ADP ribose), which is an activating signal for TRPM2 channels, thereby promoting Ca <sup>2+</sup> elevation through extracellular Ca <sup>2+</sup> influx and (or) lysosomal Ca <sup>2+</sup> release. This process eventually activates early or late autophagy in response to different degrees of oxidative stress [1].

## Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble
------------	---

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.72 mL	8.601 mL	17.203 mL
5 mM	0.344 mL	1.72 mL	3.441 mL
10 mM	0.172 mL	0.86 mL	1.72 mL
50 mM	0.034 mL	0.172 mL	0.344 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

## Reference

1. Zhang DX, et al. The potential regulatory roles of NAD(+) and its metabolism in autophagy. *Metabolism*. 2016 Apr;65(4):454-62.
2. Tóth B, et al. Pore collapse underlies irreversible inactivation of TRPM2 cation channel currents. *Proc Natl Acad Sci U S A*. 2012 Aug 14;109(33):13440-5.

Inhibitors · Natural Compounds · Compound Libraries

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use.

Tel:781-999-4286

E-mail:[info@targetmol.com](mailto:info@targetmol.com)

Address:36 Washington Street,Wellesley Hills,MA 02481