

# PRODUCT INFORMATION



## 2',3'-cyclic NADP<sup>+</sup> (sodium salt)

Item No. 38388

**CAS Registry No.:** 100929-77-9  
**Formal Name:** cyclic 2',3'-(hydrogen phosphate) adenosine 5'-(trihydrogen diphosphate), P'→5'-ester with 3-(aminocarbonyl)-1-β-D-ribofuranosylpyridinium, inner salt, disodium salt

**Synonyms:** 2',3'-cNADP<sup>+</sup>, β-Nicotinamide adenine dinucleotide-2',3'-cyclic phosphate

**MF:** C<sub>21</sub>H<sub>24</sub>N<sub>7</sub>O<sub>16</sub>P<sub>3</sub> • 2Na

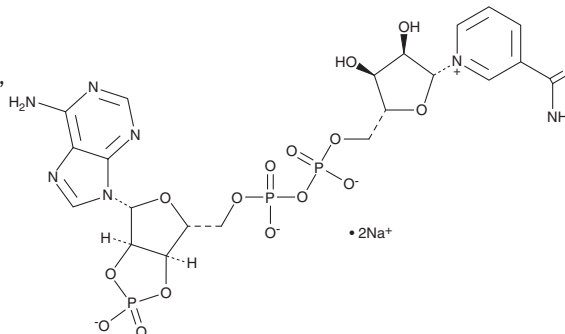
**FW:** 769.4

**Purity:** ≥95%

**Supplied as:** A solid

**Storage:** -80°C

**Stability:** ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

2',3'-cyclic NADP<sup>+</sup> (sodium salt) is supplied as a solid. A stock solution may be made by dissolving the 2',3'-cyclic NADP<sup>+</sup> (sodium salt) in water. We do not recommend storing the aqueous solution for more than one day.

### Description

2',3'-cyclic NADP<sup>+</sup> is a substrate for 2',3'-cyclic nucleotide 3'-phosphodiesterase (CNP), an enzyme that is abundant in myelin.<sup>1,2</sup> It has been used in coupled enzyme assays to quantify CNP activity.<sup>1</sup> 2',3'-cyclic NADP<sup>+</sup> (5 μM) increases calcium overload-induced calcium release and prevents calcium-induced swelling in rat brain mitochondria.<sup>2</sup>

### References

1. Sogin, D.C. 2',3'-Cyclic NADP as a substrate for 2',3'-cyclic nucleotide 3'-phosphohydrolase. *J. Neurochem.* **27(6)**, 1333-1337 (1976).
2. Azarashvili, T., Krestinina, O., Galvita, A., *et al.* Ca<sup>2+</sup>-dependent permeability transition regulation in rat brain mitochondria by 2',3'-cyclic nucleotides and 2',3'-cyclic nucleotide 3'-phosphodiesterase. *Am. J. Physiol. Cell Physiol.* **296(6)**, C1428-C1439 (2009).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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