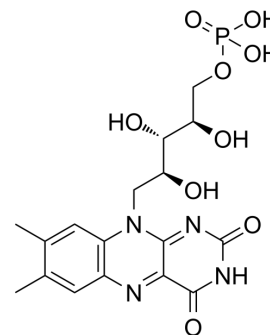


## Riboflavin phosphate

<b>Cat. No.:</b>	HY-B0964A
<b>CAS No.:</b>	146-17-8
<b>Molecular Formula:</b>	C <sub>17</sub> H <sub>21</sub> N <sub>4</sub> O <sub>9</sub> P
<b>Molecular Weight:</b>	456.34
<b>Target:</b>	Endogenous Metabolite
<b>Pathway:</b>	Metabolic Enzyme/Protease
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Riboflavine phosphate is a derivative of Riboflavin (vitamin B2) which is an essential nutrient for animals. Riboflavin phosphate can be used for the research of progressive keratoconus, corneal ectasia and irregular astigmatism <sup>[1][2]</sup> . Riboflavine phosphate is a very effective NAD <sup>+</sup> -recycling agent <sup>[3]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	Human Endogenous Metabolite
<b>In Vitro</b>	Riboflavine phosphate (Flavin mononucleotide) is clearly a very effective NAD <sup>+</sup> -recycling agent with good yields of the cyclohexanone product accompanied by high levels of NAP turnover being achieved routinely <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

- [1]. J. Bryan Jones, et al. Nicotinamide coenzyme regeneration. Flavin mononucleotide (riboflavin phosphate) as an efficient, economical, and enzyme-compatible recycling agent. *Can J Chem.* 1976, 54(19): 2969-2973,
- [2]. José Luis Revuelta, et al. Bioproduction of riboflavin: a bright yellow history. *J Ind Microbiol Biotechnol.* 2017 May;44(4-5):659-665.
- [3]. Carmine Ostacolo, et al. Enhancement of corneal permeation of riboflavin-5'-phosphate through vitamin E TPGS: a promising approach in corneal trans-epithelial cross linking treatment. *Int J Pharm.* 2013 Jan 20;440(2):148-53.

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA