Inhibitors

## **Product** Data Sheet

## **HNMPA**

Cat. No.: HY-101962 CAS No.: 132541-52-7 Molecular Formula:  $C_{11}H_{11}O_4P$ Molecular Weight: 238.18

Target: Insulin Receptor

Pathway: Protein Tyrosine Kinase/RTK

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

## **BIOLOGICAL ACTIVITY**

Description	HNMPA is a membrane impermeable insulin receptor tyrosine kinase inhibitor. HNMPA inhibits serine and tyrosine autophosphorylation by the human insulin receptor. HNMPA has no effect on protein kinase C or cyclic AMP-dependent protein kinase activities <sup>[1][2]</sup>
In Vitro	HNMPA inhibits the phosphorylation of a synthetic peptide substrate composed of insulin receptor residues 1290-1319 on serines-1305/1306 by partially purified insulin receptors <sup>[1]</sup> .  HNMPA blocks GABA-dependent insulin inhibition, and reduces neuronal firing after GABA application <sup>[2]</sup> .  MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## **REFERENCES**

[1]. K Baltensperger, et al. Catalysis of serine and tyrosine autophosphorylation by the human insulin receptor. Proc Natl Acad Sci U S A. 1992 Sep 1;89(17):7885-9.

[2]. Peter Kovacs, et al. In vivo electrophysiological effects of insulin in the rat brain. Neuropeptides. 2009 Aug;43(4):283-93.

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

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