



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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### Lieferung & Zahlungsart

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### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

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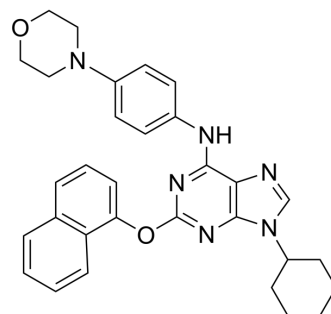
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## Purmorphamine (GMP)

<b>Cat. No.:</b>	HY-15108G
<b>CAS No.:</b>	483367-10-8
<b>Molecular Formula:</b>	C <sub>31</sub> H <sub>32</sub> N <sub>6</sub> O <sub>2</sub>
<b>Molecular Weight:</b>	520.62
<b>Target:</b>	Smo
<b>Pathway:</b>	Stem Cell/Wnt
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Purmorphamine (GMP) is <a href="#">Purmorphamine</a> (HY-15108) produced by using GMP guidelines. GMP small molecules work appropriately as an auxiliary reagent for cell therapy manufacture. Purmorphamine is a smoothed/Smo receptor agonist with an EC <sub>50</sub> of 1 μM <sup>[1]</sup> .
<b>In Vitro</b>	<p>Purmorphamine (GMP) (1.5 μM, 1 week) can generate embryoid bodies (EBs) from human iPS cells (hiPS2) and hESCs (HSF1) <sup>[1]</sup>.</p> <p>Purmorphamine (GMP) (1.5 μM) converts hPSCs to NKX2-1 positive MGE cells<sup>[2]</sup>.</p> <p>Purmorphamine (GMP) (2 μM, day 28-35) promotes ventralization of the brain spheroids in differentiation process from hiPSCs<sup>[3]</sup>.</p> <p>Purmorphamine (GMP) (1 μM) together with retinoic acid (RA, 2 μM) promotes hiPSC differentiation into functional neural tissue, indicated by the expression of neuronal marker β-tubulin III (βT-III)<sup>[4]</sup>.</p> <p>Purmorphamine (GMP) (day5-7) induces hESCs differentiation into dopaminergic (DA) neurons<sup>[5]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

### CUSTOMER VALIDATION

- Mil Med Res. 2020 Nov 1;7(1):52.
- Mil Med Res. 2020 Sep 6;7(1):42.
- Transl Neurodegener. 2024 Oct 29;13(1):53.
- J Exp Clin Cancer Res. 2018 Nov 27;37(1):287.
- Pharmacol Res. 2021 Jan 26;105460.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

### REFERENCES

- [1]. Karumbayaram S, et al. Directed differentiation of human-induced pluripotent stem cells generates active motor neurons. *Stem Cells*. 2009 Apr;27(4):806-11.
- [2]. Hu Y, et al. Directed differentiation of basal forebrain cholinergic neurons from human pluripotent stem cells. *J Neurosci Methods*. 2016 Jun 15;266:42-9.

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[3]. Hua T, et al. Phenotypic, metabolic, and biogenesis properties of human stem cell-derived cerebellar spheroids. *Sci Rep.* 2022 Jul 27;12(1):12880.

[4]. Sharma R, et al. 3D Bioprinting Pluripotent Stem Cell Derived Neural Tissues Using a Novel Fibrin Bioink Containing Drug Releasing Microspheres. *Front Bioeng Biotechnol.* 2020 Feb 11;8:57.

[5]. Sundberg M, et al. Improved cell therapy protocols for Parkinson's disease based on differentiation efficiency and safety of hESC-, hiPSC-, and non-human primate iPSC-derived dopaminergic neurons. *Stem Cells.* 2013 Aug;31(8):1548-62.

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

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