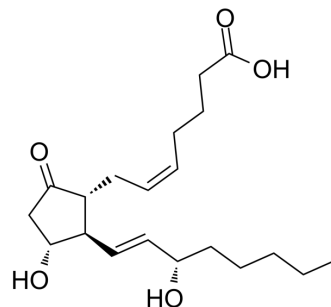


Prostaglandin E2 (GMP)

Cat. No.:	HY-101952G
CAS No.:	363-24-6
Molecular Formula:	C ₂₀ H ₃₂ O ₅
Molecular Weight:	352.47
Target:	Endogenous Metabolite
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Prostaglandin E2 (GMP) is Prostaglandin E2 (HY-101952) produced by using GMP guidelines. GMP small molecules work appropriately as an auxiliary reagent for cell therapy manufacture. Prostaglandin E2, an inflammatory mediator, is an endogenous hormone-like substance that participate in a wide range of body functions ^[1] .
In Vitro	<p>Prostaglandin E2 (GMP) (10 nM, supplemented in basic culture medium) blocks Paneth cell formation in cultured human small intestinal organoid (hSIO)^[1].</p> <p>Prostaglandin E2 (GMP) (1 or 10 μM, 24 h) increases proliferation of undifferentiated NE-4C stem cells^[2].</p> <p>Prostaglandin E2 (GMP) (1 μM, 8 day) promotes the progression of NE-4C stem cell differentiation into neuronal-lineage cells ^[2].</p> <p>Prostaglandin E2 (GMP) (1 μM, 6 or 8 day) increases the expression of Cadherin-2 (neurosphere adhesion marker)^[2].</p> <p>Prostaglandin E2 (GMP) (1 μM) enhances hematopoietic stem cells (HSCs) homing, survival, and proliferation^[3].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

CUSTOMER VALIDATION

- Cell. 2023 Dec 7;186(25):5500-5516.e21.
- Nat Biomed Eng. 2023 Mar;7(3):281-297.
- Cell Stem Cell. 2021 Sep 2;28(9):1597-1613.e7.
- Int J Oral Sci. 2023 Sep 7;15(1):38.
- J Exp Clin Cancer Res. 2020 Jun 16;39(1):113.

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REFERENCES

- [1]. He GW, et al. Optimized human intestinal organoid model reveals interleukin-22-dependency of paneth cell formation. Cell Stem Cell. 2022 Sep 1;29(9):1333-1345.e6.
- [2]. Wong CT, et al. Prostaglandin E2 promotes neural proliferation and differentiation and regulates Wnt target gene expression. J Neurosci Res. 2016 Aug;94(8):759-75.

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

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