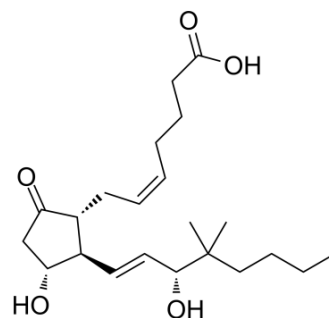


## 16,16-Dimethyl prostaglandin E2

<b>Cat. No.:</b>	HY-106420
<b>CAS No.:</b>	39746-25-3
<b>Molecular Formula:</b>	C <sub>22</sub> H <sub>36</sub> O <sub>5</sub>
<b>Molecular Weight:</b>	380.52
<b>Target:</b>	Prostaglandin Receptor
<b>Pathway:</b>	GPCR/G Protein
<b>Storage:</b>	Solution, -20°C, 2 years



### BIOLOGICAL ACTIVITY

<b>Description</b>	16,16-Dimethyl prostaglandin E2 (16,16-dimethyl PGE2) is an orally active vertebrate Hematopoietic stem cells (HSCs) homeostasis critical regulator. 16,16-Dimethyl prostaglandin E2 can act through EP2/EP4 and has an interaction with the Wnt pathway <sup>[1][2]</sup> .									
<b>IC<sub>50</sub> &amp; Target</b>	EP2	EP4								
<b>In Vivo</b>	<p>16,16-Dimethyl prostaglandin E2 (16,16-dimethyl PGE2; 10 µg/kg; i.p.; every 12 hours; for 8 days) rescues the exacerbated DSS colitis phenotype of Tpl2<sup>IMF-KO</sup> mice and restores epithelial proliferation and structure<sup>[2]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <table border="1" style="width: 100%;"> <tr> <td>Animal Model:</td> <td>Tpl2<sup>IMF-KO</sup> mice<sup>[2]</sup></td> </tr> <tr> <td>Dosage:</td> <td>10 µg/kg</td> </tr> <tr> <td>Administration:</td> <td>IP; every 12 hours; for 8 days</td> </tr> <tr> <td>Result:</td> <td>Rescued the exacerbated DSS colitis phenotype and restores epithelial proliferation and structure.</td> </tr> </table>		Animal Model:	Tpl2 <sup>IMF-KO</sup> mice <sup>[2]</sup>	Dosage:	10 µg/kg	Administration:	IP; every 12 hours; for 8 days	Result:	Rescued the exacerbated DSS colitis phenotype and restores epithelial proliferation and structure.
Animal Model:	Tpl2 <sup>IMF-KO</sup> mice <sup>[2]</sup>									
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### REFERENCES

- [1]. Hagedorn EJ, et al. Getting more for your marrow: boosting hematopoietic stem cell numbers with PGE2. *xp Cell Res.* 2014 Dec 10;329(2):220-6.
- [2]. Roulis M, et al. Intestinal myofibroblast-specific Tpl2-Cox-2-PGE2 pathway links innate sensing to epithelial homeostasis. *Proc Natl Acad Sci U S A.* 2014 Oct 28;111(43):E4658-67.

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

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