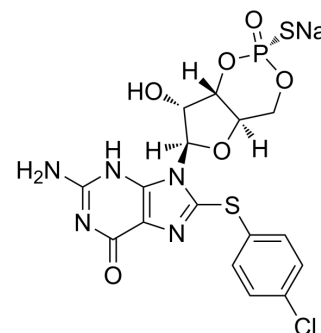


## Rp-8-pCPT-cGMPS sodium

<b>Cat. No.:</b>	HY-110221
<b>CAS No.:</b>	208445-07-2
<b>Molecular Formula:</b>	C <sub>16</sub> H <sub>14</sub> ClN <sub>5</sub> NaO <sub>6</sub> PS <sub>2</sub>
<b>Molecular Weight:</b>	525.86
<b>Target:</b>	PKG
<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>	Rp-8-pCPT-cGMPS sodium is the sodium salt form of Rp-8-pCPT-cGMPS. Rp-8-pCPT-cGMPS is an inhibitor for cGMP-dependent protein kinase (cGK). Rp-8-pCPT-cGMPS sodium is an agonist for cyclic nucleotide-gated (CNG) channels in a voltage-dependent manner <sup>[1][2]</sup> .								
<b>In Vivo</b>	<p>Rp-8-pCPT-cGMPS sodium (5 nM, intrathecally, once a day for 3 days) inhibits the cGMP-cGKI pathway, suppresses tumor cell implantation (TCI)-induced thermal hyperalgesia and mechanical allodynia in Sprague-Dawley rats model<sup>[1]</sup>. MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Animal Model:</td> <td>Bone cancer pain induced by tumor cell implantation (TCI) in Sprague-Dawley rats<sup>[1]</sup>.</td> </tr> <tr> <td>Dosage:</td> <td>0.5 mmol/L, 20 μL</td> </tr> <tr> <td>Administration:</td> <td>intrathecally, once a day for 3 days</td> </tr> <tr> <td>Result:</td> <td>Delayed and suppressed TCI-induced thermal hyperalgesia and mechanical allodynia.</td> </tr> </table>	Animal Model:	Bone cancer pain induced by tumor cell implantation (TCI) in Sprague-Dawley rats <sup>[1]</sup> .	Dosage:	0.5 mmol/L, 20 μL	Administration:	intrathecally, once a day for 3 days	Result:	Delayed and suppressed TCI-induced thermal hyperalgesia and mechanical allodynia.
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### REFERENCES

[1]. Liu S, et al., cGMP and cGMP-dependent protein kinase I pathway in dorsal root ganglia contributes to bone cancer pain in rats. *Spine (Phila Pa 1976)*. 2014 Sep 1;39(19):1533-41.

[2]. Wei JY, et al., Substituted cGMP analogs can act as selective agonists of the rod photoreceptor cGMP-gated cation channel. *J Mol Neurosci*. 1998 Feb;10(1):53-64.

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

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