

Epobis

Cat. No.:	HY-P3585
CAS No.:	915091-83-7
Molecular Formula:	C ₁₀₀ H ₁₅₁ N ₂₇ O ₂₉
Molecular Weight:	2195.44
Sequence Shortening:	NENITVPDTKVNIFYAWKR
Target:	TNF Receptor
Pathway:	Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

BIOLOGICAL ACTIVITY

Description	Epobis, a dendrimeric peptide, is a recombinant form of erythropoietin. Epobis is a potent erythropoietin receptor agonist. Epobis promotes neuritogenesis in primary motoneurons. Epobis decrease TNF release and crosses the blood-brain barrier. Epobis has anti-inflammatory and memory enhancing properties ^[1] .								
In Vitro	<p>Epobis (0-8.82 μM) stimulates neurite outgrowth from motor neurons in a dose-dependent manner with maximal stimulation at 0.33 μM^[1].</p> <p>Epobis (0-8.82 μM; 24 h) reduces release of TNF and improves the survival of the L929 cells^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Viability Assay^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>L929 cells</td> </tr> <tr> <td>Concentration:</td> <td>0-8.82 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>24 hours</td> </tr> <tr> <td>Result:</td> <td>Had a significantly higher viability of 64% in a concentration of 8.4 μM, whereas the highest viability (68%) in a concentration of 2.7 μM.</td> </tr> </table>	Cell Line:	L929 cells	Concentration:	0-8.82 μM	Incubation Time:	24 hours	Result:	Had a significantly higher viability of 64% in a concentration of 8.4 μM, whereas the highest viability (68%) in a concentration of 2.7 μM.
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In Vivo	<p>Epobis (10 mg/kg; i.h.; Wistar rats) can cross the blood-brain barrier (BBB)^[1].</p> <p>Epobis (10 mg/kg; i.h.) has an anti-inflammatory effect in mice of multiple sclerosis model^[1].</p> <p>Epobis (10 mg/kg; i.h.; old (>18 month) rats and in rats experiencing early stage AD) improves social memory^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <table border="1"> <tr> <td>Animal Model:</td> <td>Wistar rats (200 g)^[1]</td> </tr> <tr> <td>Dosage:</td> <td>10 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>Subcutaneous injection; once</td> </tr> <tr> <td>Result:</td> <td>Had detectable already 15 min after administration and remained detectable in the blood for at least 24 h.</td> </tr> </table>	Animal Model:	Wistar rats (200 g) ^[1]	Dosage:	10 mg/kg	Administration:	Subcutaneous injection; once	Result:	Had detectable already 15 min after administration and remained detectable in the blood for at least 24 h.
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Animal Model:	Wistar rats with multiple sclerosis model (200 g) ^[1]
Dosage:	10 mg/kg
Administration:	Subcutaneous injection; once
Result:	Had no significant effects on the weight changes or the survival of experimental autoimmune encephalomyelitis (EAE) animals.
Animal Model:	Old (>18 month) rats and in rats experiencing early stage AD ^[1]
Dosage:	10 mg/kg
Administration:	Subcutaneous injection; once
Result:	Had significantly lower than that of vehicle-treated animals.

REFERENCES

[1]. Dmytriyeva O, et, al. Epobis is a Nonerythropoietic and Neuroprotective Agonist of the Erythropoietin Receptor with Anti-Inflammatory and Memory Enhancing Effects. *Mediators Inflamm.* 2016;2016:1346390.

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

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