

EPO mimetic peptide-1

Cat. No.:	HY-P3756
CAS No.:	186526-28-3
Molecular Formula:	C ₉₄ H ₁₃₅ N ₂₅ O ₂₆ S ₂
Molecular Weight:	2095.36
Sequence Shortening:	GGTYSCHFGPLTWCKPQGG
Target:	Others
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

BIOLOGICAL ACTIVITY

Description	EPO mimetic peptide-1 (EMP-1), a 20 amino acid peptide. EPO mimetic peptide-1 stimulates cell proliferation, affects cell cycle and induces the production of reticulocytes in vivo ^[1] .																
In Vitro	<p>EPO mimetic peptide-1 shows inhibition of tracer ¹²⁵I-labeled EPO binding with an IC₅₀ value of 0.2 μM^[1].</p> <p>EPO mimetic peptide-1 (0-50 mM; 48 h) stimulates proliferation of both TF-1 and B6Sut cells in a dose-dependent manner^[1].</p> <p>EPO mimetic peptide-1 (1 and 10 μM) promotes erythroid colony formation from human peripheral blood and murine bone marrow^[1].</p> <p>EPO mimetic peptide-1 (10 μM; 10 min) induces the phosphorylation of proteins^[1].</p> <p>EPO mimetic peptide-1 (1 and 10 μM; 0-18 h) affects cell cycle^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Western Blot Analysis^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>FDCEP-1/mEPOR cell line</td> </tr> <tr> <td>Concentration:</td> <td>10 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>10 min</td> </tr> <tr> <td>Result:</td> <td>Induced the phosphorylation of proteins with apparent molecular weights of 140, 95, 70, and 55 Kd.</td> </tr> </table> <p>Cell Cycle Analysis^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>FDCEP-1/mEPOR cell line</td> </tr> <tr> <td>Concentration:</td> <td>10 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>0, 6, 8, 10, 12 and 18 h</td> </tr> <tr> <td>Result:</td> <td>Increased cell progression into S phase.</td> </tr> </table>	Cell Line:	FDCEP-1/mEPOR cell line	Concentration:	10 μM	Incubation Time:	10 min	Result:	Induced the phosphorylation of proteins with apparent molecular weights of 140, 95, 70, and 55 Kd.	Cell Line:	FDCEP-1/mEPOR cell line	Concentration:	10 μM	Incubation Time:	0, 6, 8, 10, 12 and 18 h	Result:	Increased cell progression into S phase.
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In Vivo	<p>EPO mimetic peptide-1 (1 and 2 mg; once) induces the production of reticulocytes over the background of endogenous in normal, untreated mice containing endogenous basal levels of EPO mice^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>																

REFERENCES

[1]. Wrighton NC, et al. Small peptides as potent mimetics of the protein hormone erythropoietin. Science. 1996 Jul 26;273(5274):458-64.

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

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