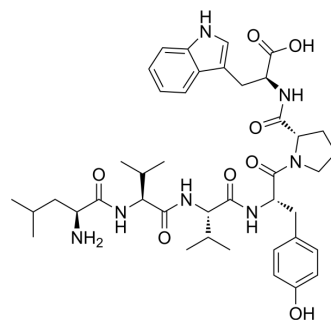


Myelo peptide-2

Cat. No.:	HY-P3736
CAS No.:	137833-31-9
Molecular Formula:	C ₄₁ H ₅₇ N ₇ O ₈
Molecular Weight:	775.93
Sequence Shortening:	LWVYPW
Target:	Interleukin Related
Pathway:	Immunology/Inflammation
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Myelo peptide-2 is a peptide originally isolated from the supernatant of porcine bone marrow cell cultures, can restore mitogenic reactivity of human T lymphocytes inhibited by HL-60 leukemia cells or measles virus conditions. Myelo peptide-2 also recover depressed interleukin-2 (IL-2) synthesis and interleukin-2 receptor (IL-2R) expression. Myelo peptide-2 involves in immunity homeostasis, is perspective to be applied in antitumor and antiviral research ^{[1][2]} .								
IC₅₀ & Target	IL-2								
In Vitro	<p>Myelo peptide-2 (1 ng/mL-0.1 mg/mL; 72 h) restores phytohemagglutinin (PHA, 2.5 mg/mL)-induced proliferation of human peripheral blood T lymphocytes^[1].</p> <p>Myelo peptide-2 (0.1 mg/mL and 1 mg/mL; 1-3 d) increases the level of the reduced IL-2 synthesis in human T lymphocytes damaged by HL-60 or measles virus^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>								
In Vivo	<p>Myelo peptide-2 (10 µg/kg; injection; for 20-50 weeks) delays the appearance of urethane-induced tumors and decreases the number of spontaneous and urethane-induced lung tumors in mice with short-term treatment^[2].</p> <p>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: 20%;">Animal Model:</td> <td>Male BALB/c mice (3-month-old) with spontaneous lung tumors^[2]</td> </tr> <tr> <td>Dosage:</td> <td>10 µg/kg; accompanied with 0.5 mg/kg Urethane (HY-B1207) or not</td> </tr> <tr> <td>Administration:</td> <td>Routine injection; (1) 1 injection of MP-2 and after 7 days 3 injections of MP-2 every other day, (2) or alternating with injections of urethane (4 injections of MP-2; 3 injections of urethane+4 injections of MP-2); (3) 3 injections of MP-2 every other day or (4) alternating with injections of urethane and after 3 weeks 2 injections of MP-2 monthly with one-week interval, a total of 22 injections (25 injections of MP-2; 3 injections of urethane+25 injections of MP-2). For 20-50 weeks.</td> </tr> <tr> <td>Result:</td> <td>Significantly lowered the incidence of urethane-induced lung adenomas in animals receiving 4 injections of MP-2 compared to the group receiving urethane alone or in combination with 25 injections of MP-2.</td> </tr> </table>	Animal Model:	Male BALB/c mice (3-month-old) with spontaneous lung tumors ^[2]	Dosage:	10 µg/kg; accompanied with 0.5 mg/kg Urethane (HY-B1207) or not	Administration:	Routine injection; (1) 1 injection of MP-2 and after 7 days 3 injections of MP-2 every other day, (2) or alternating with injections of urethane (4 injections of MP-2; 3 injections of urethane+4 injections of MP-2); (3) 3 injections of MP-2 every other day or (4) alternating with injections of urethane and after 3 weeks 2 injections of MP-2 monthly with one-week interval, a total of 22 injections (25 injections of MP-2; 3 injections of urethane+25 injections of MP-2). For 20-50 weeks.	Result:	Significantly lowered the incidence of urethane-induced lung adenomas in animals receiving 4 injections of MP-2 compared to the group receiving urethane alone or in combination with 25 injections of MP-2.
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REFERENCES

- [1]. Mikhailova AA, et al. Myelopeptide-2 recovers interleukin-2 synthesis and interleukin-2 receptor expression in human T lymphocytes depressed by tumor products or measles virus. *J Immunother.* 2006 May-Jun;29(3):306-12.
- [2]. Mikhailova AA, et al. Effect of myelopeptide-2 on the development of spontaneous and urethane-induced tumors in mice. *Bull Exp Biol Med.* 2002 Jan;133(1):68-70.
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Caution: Product has not been fully validated for medical applications. For research use only.

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