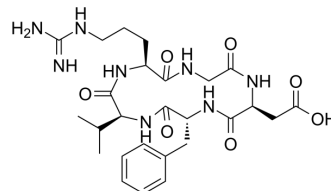


## Cyclo(Arg-Gly-Asp-D-Phe-Val)

Cat. No.:	HY-P1613
CAS No.:	137813-35-5
Molecular Formula:	C <sub>26</sub> H <sub>38</sub> N <sub>8</sub> O <sub>7</sub>
Molecular Weight:	574.63
Sequence Shortening:	Cyclo(RGD-[d-Phe]-V)
Target:	Integrin; Apoptosis
Pathway:	Cytoskeleton; Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Cyclo(Arg-Gly-Asp-D-Phe-Val) (Cyclo(RGDfV)) is an integrin $\alpha\beta3$ inhibitor. Cyclo(Arg-Gly-Asp-D-Phe-Val) has antitumor activity. Cyclo(Arg-Gly-Asp-D-Phe-Val) can be used for the research of acute myeloid leukemia <sup>[1]</sup> .																
<b>IC<sub>50</sub> &amp; Target</b>	$\alpha\beta3$ <sup>[1]</sup>																
<b>In Vitro</b>	<p>Cyclo(Arg-Gly-Asp-d-Phe-Val) (Cyclo(RGDfV)) (35 nM, 4-24 h) disrupts the adhesion and migration between the tumor cells and the matrix, induces the leukemia cells to leave the protective microenvironment and increases their sensitivity to cell cycle-dependent agents<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Cycle Analysis<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>MV4-11 cells</td> </tr> <tr> <td>Concentration:</td> <td>35 nM</td> </tr> <tr> <td>Incubation Time:</td> <td>24 h</td> </tr> <tr> <td>Result:</td> <td>Affected the leukemia cell cycle, decreased the G0/G1 phase of leukemia cells in the 3D and 2D culture systems and increased the S phase of leukemia cells in the 3D and 2D culture systems.</td> </tr> </table> <p>Apoptosis Analysis<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>MV4-11 cells</td> </tr> <tr> <td>Concentration:</td> <td>35 nM</td> </tr> <tr> <td>Incubation Time:</td> <td>24 h</td> </tr> <tr> <td>Result:</td> <td>Increased the apoptosis rates.</td> </tr> </table>	Cell Line:	MV4-11 cells	Concentration:	35 nM	Incubation Time:	24 h	Result:	Affected the leukemia cell cycle, decreased the G0/G1 phase of leukemia cells in the 3D and 2D culture systems and increased the S phase of leukemia cells in the 3D and 2D culture systems.	Cell Line:	MV4-11 cells	Concentration:	35 nM	Incubation Time:	24 h	Result:	Increased the apoptosis rates.
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### REFERENCES

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[1]. Shen ZH, et al. Targeting of the leukemia microenvironment by c(RGDfV) overcomes the resistance to chemotherapy in acute myeloid leukemia in biomimetic polystyrene scaffolds. *Oncol Lett.* 2016 Nov;12(5):3278-3284.

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

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