

Tumor targeted pro-apoptotic peptide

Cat. No.:	HY-P3707
CAS No.:	1926163-30-5
Molecular Formula:	C ₉₄ H ₁₇₄ N ₃₂ O ₂₂ S ₂
Molecular Weight:	2168.72
Sequence Shortening:	CNGRCGGKLAKLAKKLAKLAK-NH2 (Disulfide bridge:Cys1-Cys5)
Target:	Apoptosis
Pathway:	Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

BIOLOGICAL ACTIVITY

Description	Tumor targeted pro-apoptotic peptide (CNGRC-GG-D(KLAKLAK)2) is an anti-tumor peptide. Tumor targeted pro-apoptotic peptide disrupts mitochondrial membranes and promotes apoptosis, showing anticancer activity in mice ^[1] .																
In Vitro	<p>Tumor targeted pro-apoptotic peptide (10 μM; 0-20 min) induces mitochondrial swelling in DMECs^[1]. Tumor targeted pro-apoptotic peptide (100 μM; 72 h) induces apoptosis in DMECs^[1]. 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>DMECs</td> </tr> <tr> <td>Concentration:</td> <td>10 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>0-20 min</td> </tr> <tr> <td>Result:</td> <td>Induced considerable mitochondrial swelling at a concentration of 10 μM, and mild swelling was evident even at 3 μM.</td> </tr> </table> <p>Apoptosis Analysis^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>DMECs</td> </tr> <tr> <td>Concentration:</td> <td>100 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>72 h</td> </tr> <tr> <td>Result:</td> <td>Showed the classic morphological indicators of apoptosis, including nuclear condensation and fragmentation.</td> </tr> </table>	Cell Line:	DMECs	Concentration:	10 μM	Incubation Time:	0-20 min	Result:	Induced considerable mitochondrial swelling at a concentration of 10 μM, and mild swelling was evident even at 3 μM.	Cell Line:	DMECs	Concentration:	100 μM	Incubation Time:	72 h	Result:	Showed the classic morphological indicators of apoptosis, including nuclear condensation and fragmentation.
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Dosage:	250 µg/mice
Administration:	Tail vein injection; 250 µg a week for 17 weeks
Result:	Exhibited antitumor activity in vivo.

REFERENCES

[1]. Ellerby HM, et al. Anti-cancer activity of targeted pro-apoptotic peptides. Nat Med. 1999 Sep;5(9):1032-8.

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

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