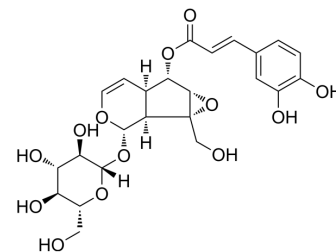


## Verminoside

<b>Cat. No.:</b>	HY-N1094
<b>CAS No.:</b>	50932-19-9
<b>Molecular Formula:</b>	C <sub>24</sub> H <sub>28</sub> O <sub>13</sub>
<b>Molecular Weight:</b>	524.47
<b>Target:</b>	PARP; MDM-2/p53
<b>Pathway:</b>	Cell Cycle/DNA Damage; Epigenetics; Apoptosis
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Verminoside is an iridoid isolated from <i>Kigelia africana</i> , exhibits anti-inflammatory and remarkable antioxidant activity with a radical-scavenging activity of 2.5 µg/mL. The genotoxicity of Verminoside on human lymphocytes is associated with elevated levels of PARP-1 and p53 proteins <sup>[1][2][3]</sup> .								
<b>IC<sub>50</sub> &amp; Target</b>	PARP-1								
<b>In Vitro</b>	<p>Verminoside (Compound 1; 0.01-1 mM; 25 hours; J774.A1 macrophages) treatment shows significant and concentration-related inhibition of iNOS expression at 0.1 mM and 1 mM in LPS-stimulated J774.A1 macrophages<sup>[1]</sup>. MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Western Blot Analysis<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>J774.A1 macrophages</td> </tr> <tr> <td>Concentration:</td> <td>0.01 mM, 0.1 mM or 1 mM</td> </tr> <tr> <td>Incubation Time:</td> <td>25 hours</td> </tr> <tr> <td>Result:</td> <td>Showed significant and concentration-related inhibition of iNOS expression at 0.1 mM and 1 mM in LPS-stimulated J774.A1 macrophages.</td> </tr> </table>	Cell Line:	J774.A1 macrophages	Concentration:	0.01 mM, 0.1 mM or 1 mM	Incubation Time:	25 hours	Result:	Showed significant and concentration-related inhibition of iNOS expression at 0.1 mM and 1 mM in LPS-stimulated J774.A1 macrophages.
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### REFERENCES

- [1]. Picerno P, et al. Anti-inflammatory activity of verminoside from *Kigelia africana* and evaluation of cutaneous irritation in cell cultures and reconstituted human epidermis. *J Nat Prod.* 2005 Nov;68(11):1610-4.
- [2]. Boniface PK, et al. RP-HPLC-DAD method for the identification of two potential antioxidant agents namely verminoside and 1-O-(E)-caffeoyl-β-gentiobiose from *Spathodea campanulata* leaves. *Nat Prod Res.* 2015;29(7):676-80.
- [3]. Santoro A, et al. Verminoside- and verbascoside-induced genotoxicity on human lymphocytes: involvement of PARP-1 and p53 proteins. *Toxicol Lett.* 2008 May 5;178(2):71-6.

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

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