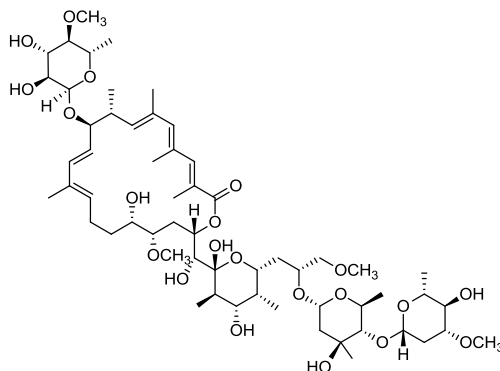


## Apoptolidin

Code No.: **BIA-A1007**

Pack sizes: **0.1 mg, 0.5 mg**



Synonyms :

## Specifications

CAS #	: <b>194874-06-1</b>
Molecular Formula	: <b>C<sub>58</sub>H<sub>96</sub>O<sub>21</sub></b>
Molecular Weight	: <b>1129.4</b>
Source	: <b><i>Amycolatopsis</i> sp.</b>
Appearance	: <b>White Lyophilisate</b>
Purity	: <b>&gt;95% by HPLC</b>
Long Term Storage	: <b>-20°C</b>
Solubility	: <b>Soluble in ethanol, methanol, DMF or DMSO. Limited water solubility.</b>

## Application Notes

Apoptolidin, originally isolated from a *Nocardopsis* sp., induces apoptotic cell death in rat glial cells transformed with the adenovirus E1A oncogene (IC<sub>50</sub> = 11 ng/ml). Apoptolidin is among the most selective cytotoxic agents tested by the NCI in human cancer cell lines. Although the apoptotic activity of apoptolidin correlates with F0F1-ATPase inhibition, recent evidence suggests the existence of a secondary biological target or more complex mode of action.

## References

1. Correlation of F0F1-ATPase inhibition and antiproliferative activity of apoptolidin analogues. Wender P.A. et al., *Org. Lett.* 2006, 8, 589.
2. Apoptolidin: induction of apoptosis by a natural product. Daniel P.T. et al., *Angew. Chem. Int. Ed. Engl.* 2006, 45, 872.
3. Understanding and exploiting the mechanistic basis for selectivity of polyketide inhibitors of F(0)F(1)-ATPase. Salomon A.R. et al., *Proc. Natl Acad. Sci. USA* 2000, 97, 14766.
4. Apoptolidin, a new apoptosis inducer in transformed cells from *Nocardopsis* sp. Kim J.W. et al., *J. Antibiot.* 1997, 50, 628.