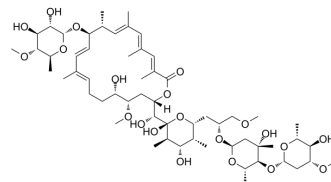


## Apoptolidin

|                           |   |       |          |
|---------------------------|---|-------|----------|
| <b>Cat. No.:</b>          | HY-126679                                       |       |          |
| <b>CAS No.:</b>           | 194874-06-1                                     |       |          |
| <b>Molecular Formula:</b> | C <sub>58</sub> H <sub>96</sub> O <sub>21</sub> |       |          |
| <b>Molecular Weight:</b>  | 1129.37   |       |          |
| <b>Target:</b>            | ATP Synthase; Apoptosis                         |       |          |
| <b>Pathway:</b>           | Membrane Transporter/Ion Channel; Apoptosis     |       |          |
| <b>Storage:</b>           | Powder  | -20°C | 3 years  |
|                           | In solvent                                      | -80°C | 6 months |
|                           |   | -20°C | 1 month  |



### BIOLOGICAL ACTIVITY

#### Description

Apoptolidin is a polyketide isolated from *Nocardiopsis* bacteria<sup>[1]</sup>. Apoptolidin is a selective mitochondrial F<sub>1</sub>F<sub>0</sub> ATPase inhibitor. Apoptolidin is an apoptosis inducer and induces apoptotic cell death in cells transformed with the adenovirus type 12 oncogenes including E1A (IC<sub>50</sub>=10-17 ng/ml) but not in normal cells<sup>[1][2]</sup>.

#### In Vitro

Apoptolidin has cytotoxicity against normal and transformed cells, it against RG-E1A-7, RG-E1A19K-2, RG-E1A54K-9, RG-E1-4 and Adl2-3Y1 with IC<sub>50</sub> values of 11 ng/ml, 10 ng/ml, 13 ng/ml, 10 ng/ml and 17 ng/ml, respectively<sup>[1]</sup>. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

[1]. J W Kim, et al. Apoptolidin, a new apoptosis inducer in transformed cells from *Nocardiopsis* sp. *J Antibiot (Tokyo)*. 1997 Jul;50(7):628-30.

[2]. A R Salomon, et al. Understanding and exploiting the mechanistic basis for selectivity of polyketide inhibitors of F(0)F(1)-ATPase. *Proc Natl Acad Sci U S A*. 2000 Dec 19;97(26):14766-71.

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

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