

<b>Product Name:</b>	Apoptolidin
<b>Product Number:</b>	A130
<b>CAS Number:</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>Appearance:</b>	White Lyophilisate
<b>Storage Conditions:</b>	-20°C
<b>Description:</b>	<p>Apoptolidin, originally isolated from a Nocardiosis 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.</p> <p>Apoptolidin is soluble in ethanol, methanol, DMF and DMSO and has limited water solubility.</p>
<b>Mechanism of Action:</b>	The apoptotic activity of apoptolidin correlates with F <sub>0</sub> F <sub>1</sub> -ATPase inhibition; however, recent evidence suggests the existence of a secondary biological target or more complex mode of action.
<b>References:</b>	<p>Correlation of F<sub>0</sub>F<sub>1</sub>-ATPase inhibition and antiproliferative activity of apoptolidin analogues. Wender P.A. et al. Org. Lett. 2006, 8, 589.</p> <p>Apoptolidin: induction of apoptosis by a natural product. Daniel P.T. et al. Angew. Chem. Int. Ed. Engl. 2006, 45, 872.</p> <p>Understanding and exploiting the mechanistic basis for selectivity of polyketide inhibitors of F<sub>0</sub>F<sub>1</sub>-ATPase. Salomon A.R. et al. Proc. Natl Acad. Sci. USA 2000, 97, 14766.</p> <p>Apoptolidin, a new apoptosis inducer in transformed cells from Nocardiosis sp. Kim J.W. et al. J. Antibiot. 1997, 50, 628.</p>