

Data Sheet (Cat.No.TN2200)



Segetalin A

Chemical Properties

CAS No.: 161875-97-4
Formula: C31H43N7O6

Molecular Weight: 609.72 Appearance: N/A

Storage: 0-4°C for short term (days to weeks), or -20°C for long term (months).

Biological Description

Description	Segetalin A has estrogen-like activity.
Targets(IC ₅₀)	Estrogen Receptor/ERR: None Estrogen/progestogen Receptor: None
In vitro	Total methanolic extracts of Saponaria vaccaria seed derived from several varieties, as well as various purified components obtained through successive chromatographic separations of total extracts were evaluated for their growth inhibitory activity in WiDr (colon), MDA-MB-231 (breast), NCI-417 (lung) and PC-3 (prostate) human cancer cells as well as the non-tumorigenic fibroblast BJ (CRL-2522) cell line using MTT colorimetric assay. Purified bisdesmosidic saponins segetoside H and I were further examined using microscopy and apoptosis assays. Bisdesmosidic saponins exhibited dose-dependent growth inhibitory and selective apoptosis-inducing activity. Growth inhibitory effects were particularly strong in a breast (MDA-MB-231) and a prostate (PC-3) cancer cell line. Total extracts exhibited a different preference being most active against a colon cancer cell line (WiDr). In a comparison of varieties, all of the total seed extracts exhibited similar dose-dependent activities, but with some variation in potency. Monodesmosidic saponins vaccarosides A and B, phenolic vaccarin, and cyclopeptide Segetalin A, co-occurring seed substituents, did not exhibit activity. The non-tumorigenic fibroblast cell line BJ (CRL 2522) was growth inhibited but did not undergo apoptosis when treated with bisdesmosidic saponins at low micromolar concentrations.

Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.64 mL	8.2 mL	16.401 mL
5 mM	0.328 mL	1.64 mL	3.28 mL
10 mM	0.164 mL	0.82 mL	1.64 mL
50 mM	0.033 mL	0.164 mL	0.328 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

Page 1 of 2 www.targetmol.com

Reference

 $1.\ Antiproliferative\ activity\ of\ Saponaria\ vaccaria\ constituents\ and\ related\ compounds. Fitoterapia.\ 2012\ Jan; 83(1):170-81.$

$Inhibitors \cdot Natural \ Compounds \cdot Compound \ Libraries$

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Page 2 of 2 www.targetmol.com