

Data Sheet (Cat.No.TN3429)

Aphagranin A

Chemical Properties

CAS No.: 1318173-53-3
Formula: C33H54O6
Molecular Weight: 546.79

Appearance: N/A

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

Biological Description

Description	Aphagranin A exhibits strong antiproliferative activity against the growth of six lines of human cancer cells (MCF-7, A549, HepG2, Bel-7402, SGC-7901, and BGC-823.
Targets(IC ₅₀)	Others: None
In vitro	METHODS AND RESULTS:Two novel tirucallane C27-triterpenoid epimers, aphagranins A (1) and B (2), featuring an unprecedented enolized cyclopentenone presented in the side-chain at C-17, were isolated from the stem barks of Aphanamixis grandifolia. Extensive spectroscopic analyses helped the establishment of the structures of the two isolates, whose absolute configurations were determined using density functional theory (DFT) calculations of optical rotation, and electronic circular dichroism (ECD). CONCLUSIONS: Remarkable discrepancies in the inhibitory activities against the growth of six lines of human cancer cells (MCF-7, A549, HepG2, Bel-7402, SGC-7901, and BGC-823) were found for the two epimers: with IC50 less than 10 μM, Aphagranin A exhibited much stronger antiproliferative activity than aphagranin B, showing no such activities with IC50 over 20 μM.

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	1.829 mL	9.144 mL	18.289 mL
5 mM	0.366 mL	1.829 mL	3.658 mL
10 mM	0.183 mL	0.914 mL	1.829 mL
50 mM	0.037 mL	0.183 mL	0.366 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.

Reference

1. A pair of tirucallane C27-triterpenoid cyclopentenone epimers from the stem barks of Aphanamixis grandifolia. Tetrahedron Letters, 2012, 53(14):1705-9.

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