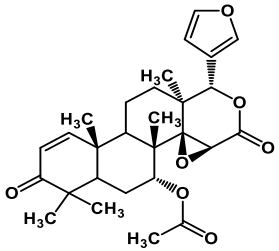
Gedunin

Name of the Phytochemical	**Gedunin**
Chemical Structure	
Botanical Source	Azadirachta indica
CAS Number	2753-30-2
Functional Activity	• Hsp90 inhibitor; exhibits anticancer and antimalarial activity • Induces Hsp90-dependent client protein degradation and displays anti-proliferative activity *in vitro* • IC_{50} values of SKBr3, MCF-7 and CaCo-2 cancer cell lines are3.22, 8.84 and 16.8 µM • Decreases ovarian cancer cell proliferation *in vitro*
Key References	1. Gedunin for Treating Neurodegenerative Diseases, **http://emoryott.technologypublisher.com/tech/Gedunin_for_TreatingNeurodegenerativeDiseases** 2. Celastrol, gedunin, and derivatives thereof as hsp90 inhibitors, **US20110263693A1, Dana-Farber Cancer Institute Inc, Massachusetts Institute of Technology** 3. In Vitro Anticancer Effect of Gedunin on Human Teratocarcinomal (NTERA-2) Cancer Stem-Like Cells, **BioMed Research International 2017, 1–9** 4. Gedunin inhibits pancreatic cancer by altering sonic hedgehog signalling pathway, **Oncotarget, 2017, 8, 10891-10904** 5. Chitosan Nano-encapsulation Enhances Gedunin Cytotoxicity A gainst Human Non-small-cell Lung Cancer (NCI-H292) Cell Line, **Drug Delivery Letters 2017, 7, 219-226** 6. Gedunin, a novel HSP-90 inhibitor, synergizes with cisplatin and paclitaxel to inhibit growth of chemoresistant ovarian cancer cell lines, **Cancer research 2014, 74, 4553**

	7. Gedunin Inactivates the Co-chaperone p23 Protein Causing Cancer Cell Death by Apoptosis, **J Biol Chem 2013, 288, 7313-7325** 8. Gedunin, a Novel Hsp90 Inhibitor: Semisynthesis of Derivatives and Preliminary Structure–Activity Relationships, **J Med Chem 2008, 51, 6495-6502**