

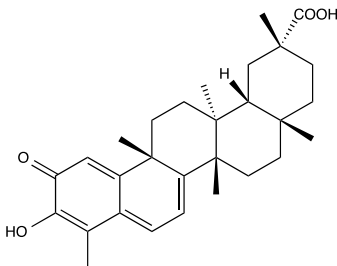
Catalog # 10-2187

Celastrol

CAS# 34157-83-0

(9 β ,13 α ,14 β ,20 α)-3-Hydroxy-9,13-dimethyl-2-oxo-24,25,26-trinoroleana-1(10),3,5,7-tetraen-29-oic acid

Lot # X102163



Displays potent antioxidant and anti-inflammatory activity. Inhibits NF κ B (IC₅₀=270 nM). It induces heat shock response and cytoprotection in various cells. Inhibits 20S proteasome chymotrypsin activity (IC₅₀=2.5 μ M). Induces autophagy by targeting AR/miR-101 in prostate cancer cells.⁴ Induces UPR-dependent cell death in cancer cells.⁵ Cell permeable.

- 1) Sethi *et al.* (2007), *Celastrol, a novel triterpene, potentiates TNF-induced apoptosis and suppresses invasion of tumor cells by inhibiting NF-kappaC-regulated gene products and TAK1-mediated NF-kappaB activation*; Blood, **109** 2727
- 2) Westerheide *et al.* (2004), *Celastrols as inducers of the heat shock response and cytoprotection*; J. Biol. Chem., **279** 56053
- 3) Yang *et al.* (2006), *Celastrol, a triterpene extracted from the Chinese "Thunder of God Vine" is a potent proteasome inhibitor and suppresses human prostate cancer cell growth in nude mice*; Cancer Res., **66** 4758
- 4) Guo *et al.* (2015), *Celastrol Induces Autophagy by Targeting AR/miR-101 in Prostate Cancer Cells*; PLoS One, **10(10)** e0140745
- 5) Fribley *et al.* (2015), *Celastrol induces unfolded protein response-dependent cell death in head and neck cancer*; Exp. Cell Res., **330** 412

PHYSICAL DATA

Molecular Weight: 450.62

Molecular Formula: C₂₉H₃₈O₄

Purity: 98% by TLC

NMR: (Conforms)

Solubility: DMSO (up to 45 mg/ml), or ethanol (up to 30 mg/ml)

Physical Description: Red solid

Storage and Stability: Store as supplied at -20°C for up to 2 year from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 1 month.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.