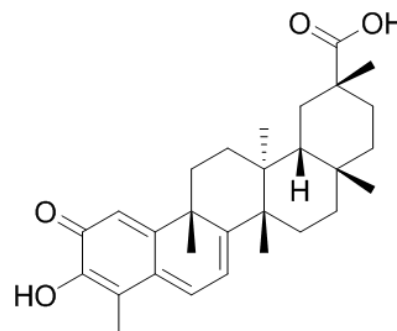


Product Name : Celastrol
Cat. No. : PC-43371
CAS No. : 34157-83-0
Molecular Formula : C₂₉H₃₈O₄
Molecular Weight : 450.6096
Target : Proteasome
Solubility : 10 mM in DMSO



Biological Activity

Celastrol (Tripterin) is an active compound extracted from Chinese medicine Thunder of God Vine, is a potent proteasome inhibitor, preferentially inhibits the chymotrypsin-like activity of **20S proteasome** with IC₅₀ of 2.5 uM.

Celastrol also inhibits 26S proteasome in intact androgen-independent PC-3 and androgen-dependent LNCaP prostate cancer cells at 1-5 uM, induces apoptotic cell death, and accumulates ubiquitinated proteins and natural proteasome substrates, IκB-α, Bax, and p27, and/or suppression of AR protein expression.

Celastrol promotes significant tumor growth inhibition and massive apoptosis induction in vivo.

Celastrol also is a nonselective peroxiredoxin 1 (**PRDX1**) inhibitor covalently linked to the Cys-173 residue of PRDX1 via a Michael-like addition reaction.

References

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Chen M, et al. Mol Cancer Res. 2009 Dec;7(12):1946-53.

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Caution: Product has not been fully validated for medical applications. Lab Use Only!

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