

## **Data Sheet**

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Product Name : Celastrol
Cat. No. : PC-43371
CAS No. : 34157-83-0
Molecular Formula : C<sub>29</sub>H<sub>38</sub>O<sub>4</sub>
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; 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,  $I\kappa B-\alpha$ , Bax, and Bax, and Bax, and Bax, and Bax protein expression; promotes significant tumor growth inhibition and massive apoptosis induction in vivo.

## References

Yang H, et al. Cancer Res. 2006 May 1;66(9):4758-65.

Yadav VR, et al. J Mol Med (Berl). 2010 Dec;88(12):1243-53.

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

Ge P, et al. Neurol Res. 2010 Feb;32(1):94-100.

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

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