

# Product Datasheet

## Celastrol, IL-17A (IL-17A Inhibitor)

### NBP2-29362-0.01g

Unit Size: 0.01 g

Store at -20C in powder form. Store at -80C once reconstituted.

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**NBP2-29362-0.01g**

Celastrol, IL-17A (IL-17A Inhibitor)

Product Information	
Unit Size	0.01 g
Concentration	Concentration is not relevant for this product. Please see the protocols for proper use of this product.
Storage	Store at -20C in powder form. Store at -80C once reconstituted.
Buffer	Solubility:DMSO: >10 mg/mL assay:>or equal to 98% (HPLC)

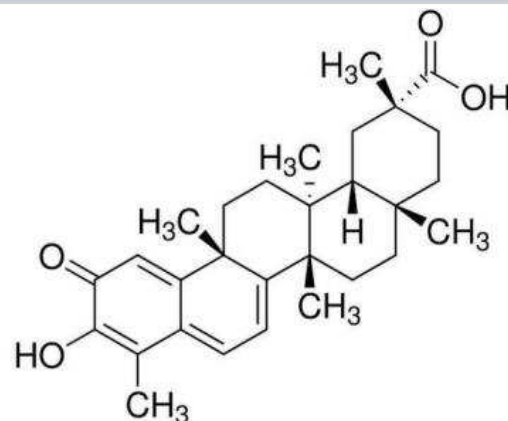
Product Description	
Immunogen	CAS Number 34157-83-0 Empirical Formula (Hill Notation) C <sub>29</sub> H <sub>38</sub> O <sub>4</sub> Molecular Weight 450.61
Preparation Method	1. To make a 50 mM stock solution, dissolve 1 mg celastrol in 44.5 ul anhydrous dimethyl sulfoxide (DMSO) by gentle vortex. 2. Divide into useable aliquots and store them at -20oC. 3. The stock solution may be diluted further to make working solutions in DMSO. The final DMSO concentration in the cells to be analyzed should not exceed 1%.
Inhibitor Target	IL-17A

Product Application Details	
Application Notes	Celastrol is used in assays to inhibit IL-17A induction. We recommend an initial titration of the inhibitor from 0-50 uM for in vitro assays along with vehicle. The IL-17A Prom/LUCPorter cell line (NBP2-26283), which is a semi-constitutively active cell line, is a useful positive control model system for studying inhibition of IL-17A induction by celastrol (Figure 2). The anti-CD3/CD28-stimulated peripheral blood mononuclear cells (PBMC) are another model system for studying inhibition of IL-17A production (Figure 3).

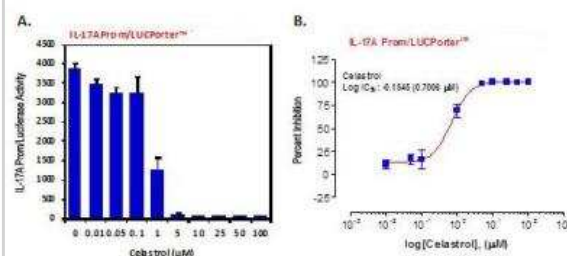


## Images

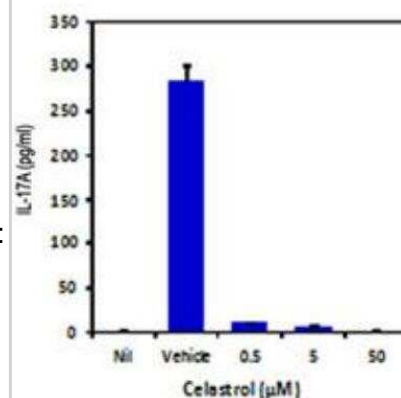
Celastrol, IL-17A Inhibitor Inhibitor [NBP2-29362]



Celastrol, IL-17A Inhibitor Inhibitor [NBP2-29362] - Celastrol, IL-17A Inhibitor Inhibitor Evaluation of inhibitory activity on induction of IL-17A. IL-17A Prom/ LUCPorter™ HEK 293 cells were plated in 96-well white plates at  $5 \times 10^4$  cells/well for 16 h. Cells were treated with different concentrations of IL-17A inhibitor between 0 and 100  $\mu\text{M}$  as noted [A] for 6 h. The luciferase reporter assay reagent was then directly added to the cell plates (50  $\mu\text{l}$ /well). After 10 min, the plates were analyzed by reading in a plate luminometer. The values from [A] were used to determine the  $\text{IC}_{50}$  of the IL-17A inhibitor [B]. Data Summary: Celastrol inhibited the IL-17A promoter induction in a dose-response manner, of which  $\text{IC}_{50}$  was measured as 0.7  $\mu\text{M}$ .



Celastrol, IL-17A Inhibitor Inhibitor [NBP2-29362] - The inhibitor suppresses IL-17A production in human PBMC stimulated with anti-CD3/CD28. Peripheral blood mononuclear cells (PBMC) were stimulated with anti-CD3 and anti-CD28 in the presence or absence of celastrol (0.5, 5 and 50  $\mu\text{M}$ ) for 3 days. IL-17A was then measured from the cell culture media using the Human IL-17A ActivELISA. Data Summary: PBMCs that were stimulated with anti-CD3/CD28 produced IL-17A, of which induction was inhibited by the IL-17A inhibitor. Vehicle: DMSO, Nil: no anti-CD3/CD28 stimulated PBMCs.





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### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Inhibitors are guaranteed for 1 year from date of receipt.

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