

Catalog # 10-3715 Cycloastragenol

CAS# 84605-18-5 20,24R-Epoxy-9,19-cyclolanostane-3ß,6α,25-tetrol Lot # E107427

Cycloastragenol is a novel naturally occurring terpenoid found in *Astragalus* which was shown to be a telomerase activator. In CD8⁺ T lymphocytes from HIV-infected donors it retarded telomere shortening, increased proliferative potential and enhanced cytokine/chemokine production and antiviral activity.¹ It suppressed lung damage in a idiopathic pulmonary fibrosis mouse model.² It has also been shown to be a novel senolytic agent, inducing senescent cell apoptosis and restoring physical function in mice with irradiation-induced aging.³

- 1) Fauce et al. (2008), Telomerase-Based Pharmacologic Enhancement of Antiviral Function of Human CD8⁺ T Lymphocytes; J. Immunol. **181** 7400
- 2) Le Saux et al. (2013), A novel telomerase activator suppresses lung damage in a murine model of idiopathic pulmonary fibrosis; PLoS One 8 e58423
- 3) Zhang et al. (2023), Cycloastragenol: A Novel Senolytic Agent That Induces Senescent Cell Apoptosis and Restores Physical Function in TBI-Aged Mice; Int. J. Mol. Sci. **24** 6554

PHYSICAL DATA

 $\begin{array}{ll} \mbox{Molecular Weight:} & 490.73 \\ \mbox{Molecular Formula:} & C_{30}\mbox{H}_{50}\mbox{O}_5 \\ \mbox{Purity:} & >98\% \mbox{ by HPLC} \end{array}$

NMR: (Conforms)

Solubility: DMSO (60 mg/ml); Ethanol (15 mg/ml)

Physical Description: White solid

Storage and Stability: Store as supplied at -20°C for up to 2 years from the date of purchase.

Solutions in DMSO or ethanol may be stored at -20°C for up to 3 months.

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