

Catalog # 10-2631 Triptolide

CAS# 38748-32-2

(3bS,4aS,5aS,6R,6aR,7aS,7bS,8aS,8bS)-3b,4,4a,6,6a,7a,7b,8b,9,10-Decahydro-6-hydroxy-8b-methyl-6a-(1-methylethyl)trisoxireno[4b,5:6,7:8a,9]phenanthro[1,2-c]furan-1(3H)-one; PG490

Lot # X101417

Possesses potent immunosuppressive and anti-inflammatory activity. Irreversibly inhibits eukaryotic transcription via covalent binding to XPB, a subunit of the transcription factor TFIIH.¹ Blocks transactivation of NF κ B.² Exhibits potent antiproliferative activity in 60 cancer cell lines (average IC₅₀ = 12 nM) and synergizes with other anticancer agents.³ Inhibits the inflammatory response and remarkably decreases production of TNF- α , IL-1 β and IL-6 in a rat model of rheumatoid arthritis.⁴

- 1) He et al. (2015), Covalent Modification of a Cysteine Residue in the XPB Subunit of the General Transcription Factor TFIIH Through Single Epoxide Cleavage of the Transcription Inhibitor Triptolide; Angew.Chem.Int.Ed.Eng. **54** 1859
- Lee et al. (1999), PG490 (Triptolide) Cooperates with Tumor Necrosis factor-α to Induce Apoptosis in Tumor Cells; J.Biol.Chem, 274 13451
- 3) Qiao et al. (2016), Synergistic antitumor activity of gemcitabine combined with triptolide in pancreatic cancer cells; Oncol.Lett., **11** 3527
- 4) Fan et al. (2016), Triptolide Modulates TREM-1 Signal Pathway to Inhibit the Inflammatory Response in Rheumatoid Arthritis; Int.J.Mol.Sci. 17 498

PHYSICAL DATA

 $\begin{array}{ll} \text{Molecular Weight:} & 360.40 \\ \text{Molecular Formula:} & C_{20}H_{24}O_6 \end{array}$

Purity: >98% by HPLC

NMR: (Conforms)

Solubility: DMSO (7 mg/mL)

Physical Description: Tan solid

Storage and Stability: Store as supplied at -20 for up to 1 year from the date of purchase.

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

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