

## **Data Sheet**

WWW.PROBECHEM.COM

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name : Triptolide
Cat. No. : PC-45814
CAS No. : 38748-32-2
Molecular Formula : C<sub>20</sub>H<sub>24</sub>O<sub>6</sub>
Molecular Weight : 360.401
Target : TAK1

**Solubility** : DMSO: ≥ 33 mg/mL

## **Biological Activity**

Triptolide (PG490) is the active diterpene in the traditional Chinese medicine Lei Gong Teng, induces Ca(2+) release by a polycystin-2 (PC2)-dependent mechanism.

Triptolide (PG490) arrests cellular proliferation and attenuates overall cyst formation by restoring Ca(2+) signaling in a murine model of ADPKD.

Triptolide (PG490) also covalently binds to human **XPB (ERCC3)**, a subunit of the transcription factor TFIIH, and inhibits its DNA-dependent ATPase activity, which leads to the inhibition of RNA polymerase II-mediated transcription. Triptolide (PG490) inhibits **TAK1** kinase activity by interfering with the formation of the TAK1-TAB1 complex in macrophages.

## References

Leuenroth SJ, et al. *Proc Natl Acad Sci U S A*. 2007 Mar 13;104(11):4389-94.

Titov DV, et al. *Nat Chem Biol.* 2011 Mar;7(3):182-8.

Lu Y, et al. *Chem Biol.* 2014 Feb 20;21(2):246-56.

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

E-mail: tech@probechem.com