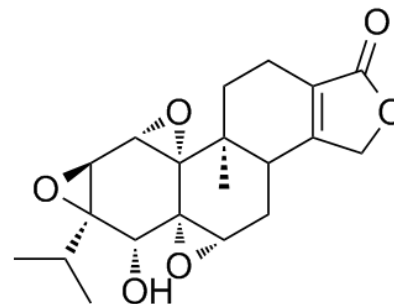


**Product Name** : Triptolide  
**Cat. No.** : PC-45814  
**CAS No.** : 38748-32-2  
**Molecular Formula** : C<sub>20</sub>H<sub>24</sub>O<sub>6</sub>  
**Molecular Weight** : 360.401  
**Target** : TAK1  
**Solubility** : DMSO: ≥ 33 mg/mL



## Biological Activity

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

Triptolide (PG490) arrests cellular proliferation and attenuates overall cyst formation by restoring Ca<sup>2+</sup> 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!**

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