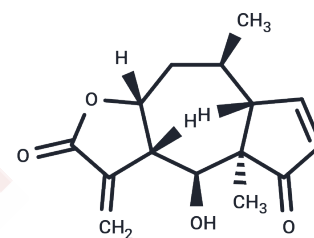


## Helenalin

## Chemical Properties

CAS No. :	6754-13-8
Formula:	C <sub>15</sub> H <sub>18</sub> O <sub>4</sub>
Molecular Weight:	262.3
Storage:	Powder: -20°C for 3 years   In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



## Biological Description

Description	Helenalin is a selective inhibitor of transcription factor NF-κB by direct targeting of p65. It is an anti-inflammatory sesquiterpene lactone compound with alkylating activity. Through its ability to target the cysteine sulfhydryl groups in the p65 subunit of NF-κB, helenalin effectively inhibits its DNA binding.
Targets(IC50)	Others,NF-κB
In vitro	After 80 minutes, Helenalin (10 μM; 20-120 minutes) induces complete inhibition of NF-κB DNA binding [1]. Helenalin, the anti-inflammatory and anti-carcinogenic phytochemicals, is an effective inhibitor of periodic Skp2 accumulation which is an F-box protein mediating SCF E3 ligase ubiquitylation and degradation of both CKIs during S phase progression[3].
In vivo	To immature male ICR mice, Helenalin (25 mg/kg; i.p.; 6 to 12 hours) administers, induced a rapid reduction in hepatic glutathione levels[2].

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.8124 mL	19.0621 mL	38.1243 mL
5 mM	0.7625 mL	3.8124 mL	7.6249 mL
10 mM	0.3812 mL	1.9062 mL	3.8124 mL
50 mM	0.0762 mL	0.3812 mL	0.7625 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Merrill JC, et al. Role of glutathione in the toxicity of the sesquiterpene lactones hymenoxon and helenalin. J Toxicol Environ Health. 1988;23(2):159-69.

Lyss G, et al. The anti-inflammatory sesquiterpene lactone helenalin inhibits the transcription factor NF-kappaB by directly targeting p65. J Biol Chem. 1998 Dec 11;273(50):33508-16.

Fernandes KM, et al. Helenalin-mediated post-transcriptional regulation of p21(Cip1) inhibits 3T3-L1 preadipocyte proliferation. J Cell Biochem. 2008 Oct 15;105(3):913-21.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481