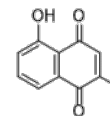


**Product Name** : Plumbagin  
**Cat. No.** : PC-23230  
**CAS No.** : 481-42-5  
**Molecular Formula** : C<sub>11</sub>H<sub>8</sub>O<sub>3</sub>  
**Molecular Weight** : 188.18  
**Target** : TRP Channel  
**Solubility** : 10 mM in DMSO



## Biological Activity

Plumbagin (2-Methyljuglone) is a naphthoquinone isolated from *Plumbago zeylanica*, exhibits anticancer and antiproliferative activities, also is a potent TRPV2 negative allosteric modulator with IC<sub>50</sub> of 0.85 μM, exhibiting >14-fold selectivity over TRPV1, TRPV3 and TRPV4.

Plumbagin (2-Methyljuglone) also is a novel PKM2 inhibitor and it could bind to PKM2 to inhibit the enzymatic activity, induces oxidative stress and apoptosis in hepatoma cells.

Plumbagin (2-Methyljuglone) also inhibits the cytosolic glutathione-degrading enzyme, ChaC1 with IC<sub>50</sub> of 8.7 μM.

Plumbagin inhibits fungal growth, HMGB1/LOX-1 pathway and inflammatory factors in *A. fumigatus* keratitis.

## References

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Suyal S, et al. Biochem J. 2024 Oct 16;481(20):1475-1495.

Ding M, et al. Br J Pharmacol. 2024 Oct 3. doi: 10.1111/bph.17343.

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

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