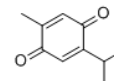


**Product Name** : Thymoquinone  
**Cat. No.** : PC-70009  
**CAS No.** : 490-91-5  
**Molecular Formula** : C<sub>10</sub>H<sub>12</sub>O<sub>2</sub>  
**Molecular Weight** : 164.2  
**Target** : IRAK  
**Solubility** : 10 mM in DMSO



### Biological Activity

Thymoquinone is an anticancer phytochemical commonly found in black cumin, exhibits anticancer activity via numerous mechanisms of action, specifically by showing selective antioxidant and oxidant activity.

Thymoquinone directly suppresses **IRAK1**, strongly inhibits the production of nitric oxide (NO) and repressed NO synthase (iNOS), TNF- $\alpha$ , COX-2, IL-6, and IL-1 $\beta$  expression in LPS-activated RAW264.7 cells.

Thymoquinone significantly ameliorates disease symptoms in LPS/D-GalN-induced hepatitis and EtOH/HCl-induced gastritis mouse models.

### References

Khan MA, et al. *Oncotarget*. 2017 Apr 18. doi: 10.18632/oncotarget.17206.

Hossen MJ, et al. *Sci Rep*. 2017 Feb 20;7:42995.

Rukoyatkina N, et al. *Cell Death Dis*. 2017 Jun 29;8(6):e2898.

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

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