

## Triptoquinone A

## Chemical Properties

CAS No.:	142950-86-5
Formula:	C <sub>20</sub> H <sub>24</sub> O <sub>4</sub>
Molecular Weight:	328.4
Appearance:	N/A
Storage:	0-4°C for short term (days to weeks), or -20°C for long term (months).

## Biological Description

Description	Triptoquinone A may be a useful candidate for the development of a drug as a potent inhibitor of iNOS gene over-expression. Triptoquinone A has anti-inflammatory activity, it prevents endotoxin-or interleukin-1 beta-promoted induction of nitric oxide synthase in vascular smooth muscle, thus inhibiting development of L-arginine-induced vasorelaxation.
Targets(IC <sub>50</sub> )	IL Receptor: None NO: None NOS: None
In vitro	Triptoquinone A (TQA), which is an anti-inflammatory constituent in plants, was studied for its suppressive effect on nitric oxide production by LPS. METHODS AND RESULTS: TQA significantly suppressed smooth muscle relaxation and increase in cyclic GMP levels by nitric oxide (NO) in an L-arginine-induced relaxation experiment. The mechanistic studies showed that TQA did not directly inhibit NO radicals and inducible nitric oxide synthase (iNOS) enzyme but suppressed IL-1 beta and iNOS mRNA expression by LPS. The suppression level of iNOS gene expression by TQA was comparable to that by dexamethasone. CONCLUSIONS: TQA may be a useful candidate for the development of a drug as a potent inhibitor of iNOS gene over-expression.

## Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble
------------	---

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.045 mL	15.225 mL	30.451 mL
5 mM	0.609 mL	3.045 mL	6.090 mL
10 mM	0.305 mL	1.523 mL	3.045 mL
50 mM	0.061 mL	0.305 mL	0.609 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

Reference

1. Suppression of inducible nitric oxide synthase mRNA expression by tryptoquinone A. Biochem Biophys Res Commun. 1996 Jul 16;224(2):579-85.

[Inhibitors](#) · [Natural Compounds](#) · [Compound Libraries](#)

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

Tel:781-999-4286

E-mail:[info@targetmol.com](mailto:info@targetmol.com)

Address:36 Washington Street,Wellesley Hills,MA 02481