



Catalog # 10-2228

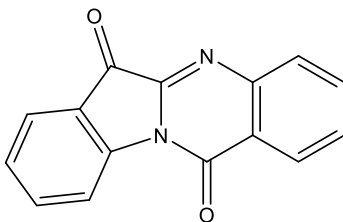
Tryptanthrin

CAS# 13220-57-0

Indolo(2,1-b)quinazoline-6,12-dione

NSC 349447; Couroupitine A

Lot # X101615



A indoloquinazoline alkaloid found in various plant species and possessing intriguing pharmacological activities.¹ Suppresses activation of BV2 microglia cells following LPS treatment and reduces production of proinflammatory cytokines via Nrf2, HO-1 and NFκB signaling.² Displays antiinflammatory activity targeting IL-17.³ Inhibits indoleamine 2,3-dioxygenase 2 (IDO2) with an IC₅₀ of 5-17 μM.⁴ Induces growth inhibition and neuronal differentiation in human neuroblastoma LA-N-1 cells.⁵

- 1) Jahng *et al.* (2013), *Progress in the studies on tryptanthrin, an alkaloid of history*; Arch. Pharm. Res., **36** 517
- 2) Kwon *et al.* (2017), *Tryptanthrin Suppresses the Activation of the LPS-Treated BV2 Microglial Cell Line via Nrf2/HO-1 Antioxidant Signaling*; Front. Cell. Neurosci., **11** 18
- 3) Cheng *et al.* (2017), *Clinical efficacy and IL-17 targeting mechanism of Indigo naturalis as a topical agent in moderate psoriasis*; BMC Complement. Altern. Med., **17** 439
- 4) Li *et al.* (2016), *Establishment of a human indoleamine 2,3-dioxygenase 2 (hIDO2) bioassay system and discovery of tryptanthrin derivatives as potent hIDO2 inhibitors*; Eur. J. Med. Chem., **123** 171
- 5) Liao and Leung (2013), *Tryptanthrin induces growth inhibition and neuronal differentiation in the human neuroblastoma LA-N-1 cells* Eur. Chem. Biol. Interact., **203** 512

PHYSICAL DATA

Molecular Weight:	248.24
Molecular Formula:	C ₁₅ H ₈ N ₂ O ₂
Purity:	98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (up to 30 mg/ml)
Physical Description:	Yellow solid
Storage and Stability:	Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

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