

Catalog # 10-2883

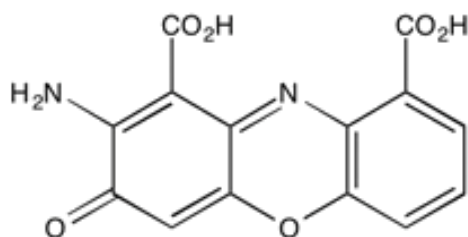
Cinnabarinic acid

CAS# 606-59-7

2-amino-3-oxo-3H-phenoxazine-1,9-dicarboxylic acid

Cinnabaric acid

Lot # S102120



A novel endogenous tryptophan metabolite which acts as an aryl hydrocarbon receptor (AHR) agonist.¹ It drives IL-22 production by stimulating the differentiation of human and mouse T cells producing IL-22.¹ Induces apoptosis in thymocytes.² Activates type 4 metabotropic glutamate receptors.³ Counteracts excitotoxic neuronal cell death induced by NMDA in mixed cultures of cortical cells. Displays neuroprotective activity.³

- 1) Lowe *et al.* (2014), *Identification of cinnabarinic acid as a novel endogenous aryl hydrocarbon receptor ligand that drives IL-22 production*; PLoS One, **9(2)** e87877
- 2) Hiramatsu *et al.* (2008), *Cinnabarinic acid generated from 3-hydroxyanthranilic acid strongly induces apoptosis in thymocytes through the generation of reactive oxygen species and the induction of caspase*; J. Cell. Biochem. **103** 42
- 3) Fazio *et al.* (2012), *Cinnabarinic acid, an endogenous metabolite of the kynurenine pathway, activates type 4 metabotropic glutamate receptors*; Mol. Pharmacol. **81** 643

PHYSICAL DATA

Molecular Weight:	300.22
Molecular Formula:	C ₁₄ H ₈ N ₂ O ₆
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 30 mg/ml), or DMF (up to 25 mg/ml)
Physical Description:	Red solid
Storage and Stability:	Store as supplied, desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO or DMF may be stored at -20°C for up to 1 month.

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