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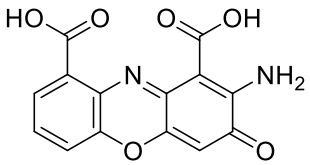
PRODUCT DATA SHEET

Cinnabarinic acid

Code No.: **BIA-C2356**

Pack sizes: **0.1 mg, 0.5 mg**



Synonyms : Cinnabaric acid, Cinnavalininic acid

Specifications

CAS #	:	**606-59-7**
Molecular Formula	:	**$C_{14}H_8N_2O_6$**
Molecular Weight	:	**300.22**
Source	:	**Synthetic**
Appearance	:	**White solid**
Purity	:	**>95% by HPLC**
Long Term Storage	:	**-20°C**
Solubility	:	**Soluble in methanol or DMSO**

Application Notes

Cinnabarinic acid is an endogenous kynurenine metabolite formed from oxidative dimerization of 3-hydroxyanthranilic acid and transamination of 3-hydroxykynurenine. Cinnabarinic acid activates glutamate receptors by interacting with residues of the glutamate binding pocket of mGlu4. Cinnabarinic acid induces apoptosis in T cells through generation of reactive oxygen species, the loss of mitochondrial membrane potential and caspase activation.

References

1. Cinnabarinic acid, an endogenous metabolite of the kynurenine pathway, activates type 4 metabotropic glutamate receptors. Fazio F. et al. Mol Pharmacol. 2012, 81, 643.
2. Effects of cinnabarinic acid on mitochondrial respiration. Zollner H. Biochem Pharmacol. 1976, 2, 643.
3. Cinnabarinic acid generated from 3-hydroxyanthranilic acid strongly induces apoptosis in thymocytes through the generation of reactive oxygen species and the induction of caspase. Hariamatsu R. et al. J Cell Biochem. 2008, 103, 42.

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