

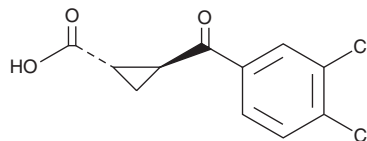
PRODUCT INFORMATION



UPF-648

Item No. 32860

CAS Registry No.: 213400-34-1
Formal Name: (1S,2S)-2-(3,4-dichlorobenzoyl)-cyclopropanecarboxylic acid
Synonym: (±)-DBCC
MF: C₁₁H₈Cl₂O₃
FW: 259.1
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

UPF-648 is supplied as a solid. A stock solution may be made by dissolving the UPF-648 in the solvent of choice, which should be purged with an inert gas. UPF-648 is soluble in the organic solvent DMSO.

Description

UPF-648 is an inhibitor of kynurenine 3-monooxygenase (IC₅₀ = 40 nM).¹ It increases kynurenine and kynurenic acid and decreases 3-hydroxykynurenine brain levels in newborn rats for up to 12 hours when administered at a dose of 30 mg/kg.² UPF-648 (30 μM) is protective against rhabdomyere neurodegeneration in the eye in a *Drosophila* model of Huntington's disease.³ It also decreases hypersensitivity to mechanical and thermal stimuli in a rat model of neuropathic pain induced by chronic constriction injury to the sciatic nerve.⁴

References

1. Pellicciari, R., Amori, L., Costantino, G., *et al.* Modulation of the kynurine pathway of tryptophan metabolism in search for neuroprotective agents. Focus on kynurenine-3-hydroxylase. *Adv. Exp. Med. Biol.* **527**, 621-628 (2003).
2. Ceresoli-Borroni, G., Guidetti, P., Amori, L., *et al.* Perinatal kynurenine 3-hydroxylase inhibition in rodents: Pathophysiological implications. *J. Neurosci. Res.* **85**(4), 845-854 (2007).
3. Campesan, S., Green, E.W., Breda, C., *et al.* The kynurenine pathway modulates neurodegeneration in a *Drosophila* model of Huntington's disease. *Curr. Biol.* **21**(11), 9611-966 (2011).
4. Rojewska, E., Ciapała, K., Piotrowska, A., *et al.* Pharmacological inhibition of indoleamine 2,3-dioxygenase-2 and kynurenine 3-monooxygenase, enzymes of the kynurenine pathway, significantly diminishes neuropathic pain in a rat model. *Front. Pharmacol.* **9**, 724 (2018).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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