
Product Data Sheet

Product Name: UPF-648 sodium salt

Cat. No.: GC31067

Chemical Properties

Cas. No. 1465017-87-1

SMILES C1C=C(Cl)C=CC(C([C@@]2([H])C[C@]2([H])C([O-])=O)=O)=O.[Na+]Formula $C_{11}H_7Cl_2NaO_3$ M.Wt 281.07

Solubility Soluble in DMSO Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure

Background

UPF-648 is an inhibitor of kynurenine 3-monooxygenase ($IC_{50} = 40 \text{ nM}$).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

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):9611-9966 (2011)
 4. Rojewska, E., Ciapała, K., Piotrowska, A., et al. Pharmacological inhibition of indoleamine 2,3-

Caution: Product has not been fully validated for medical applications. For research use only.

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dioxygenase-2 and kynurenine 3-monooxygenase, enzymes of the kynurenine pathway, significantly diminishes neuropathic pain in a rat model Front. Pharmacol.9724(2018)

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