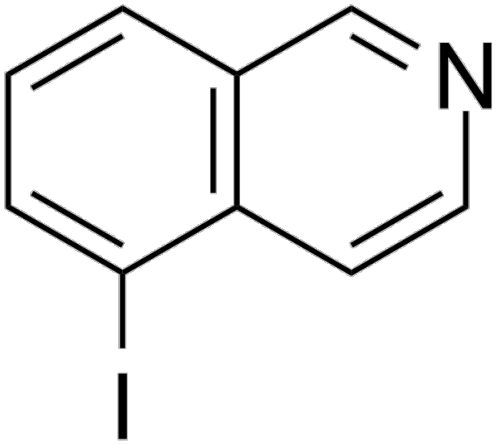
Product Data Sheet

Product Name: DSRM-3716
Cat. No.: GC62944

Chemical Properties

Cas. No.	58142-99-7		
Formula	C_9H_6IN	M.Wt	255.06
Solubility	DMSO : 50 mg/mL (196.03 mM; Need ultrasonic)	Storage	4°C, protect from light
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

DSRM-3716 (5-Iodoisoquinoline) is a potent and selective SARM1 NADase inhibitor with an IC50 of 75 nM. DSRM-3716 is selective against other NAD+-processing enzymes, receptors, and transporters. DSRM-3716 provides robust axon protection[1].

DSRM-3716 treatment produces dose-dependent inhibition of cADPR increase (IC50 of 2.8 μM) and substantial preservation of NAD+ in these cultures in a manner consistent with engagement and inhibition of SARM1 enzymatic NADase activity inside the cells[1]. DSRM-3716 prevents

neurofilament light chain (NfL) release from severed axons in a dose-dependent manner, with an IC50 of ~2 μM[1]. The potency of DSRM-3716 to inhibit cADPR increase caused by axotomy (IC50 of 2.8 μM) is similar to the potency required to prevent axonal degeneration (IC50 of 2.1 μM)[1]. DSRM-3716 inhibits the SARM1-dependent cell destruction pathway triggered by Rotenone in sensory neurons[1].

[1]. Robert O Hughes, et al. Small Molecule SARM1 Inhibitors Recapitulate the SARM1 -/- Phenotype and Allow Recovery of a Metastable Pool of Axons Fated to Degenerate. Cell Rep. 2021 Jan 5;34(1):108588.