Product Data Sheet

Product Name: Direct Black 38
Cat. No.: GC38068

Chemical Properties

Cas. No.	1937-37-7		
SMILES	O=S(C1=C(/N=N/C2=CC=C(C3=CC=C(/N=N/C4=CC=C(N)C=C4N)C=C3)C=C2)C(N)=C5C(O)=C(/N=N/C6=CC=CC=C6)C(S(=O)(O[Na])=O)=CC5=C1)(O[Na])=O		
Formula	$C_{34}H_{25}N_9Na_2O_7S_2$	M.Wt	781.73
Solubility	Water: 5 mg/mL (6.40 mM)	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ 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	Direct Black 38		

Background

Ferristatin II is an inhibitor of iron uptake.[1] It inhibits iron uptake (IC_{50} = ~12 ?M), as well as induces degradation of transferrin receptor protein 1 (TfR1), an effect that can be reversed by the lipid membrane disruptor nystatin, in HeLa cells. *In vivo* ferristatin II (0.2, 10, and 40 mg/kg) reduces serum iron levels and transferrin saturation in rats. It also suppresses traumatic brain injury-induced lipid peroxidation, neuronal apoptosis, and the number of cortical iron deposits in rats.[2]

1.Byrne, S.L., Buckett, P.D., Kim, J., et al.Ferristatin II promotes degradation of transferrin receptor-1 in vitro and in vivoPLoS One8(7)e70199(2013) 2.Cheng, Y., Qu, W., Li, J., et al.Ferristatin II, an iron uptake inhibitor, exerts neuroprotection against traumatic brain injury via suppressing ferroptosisACS Chem. Neurosci.13(5)664-675(2022)

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