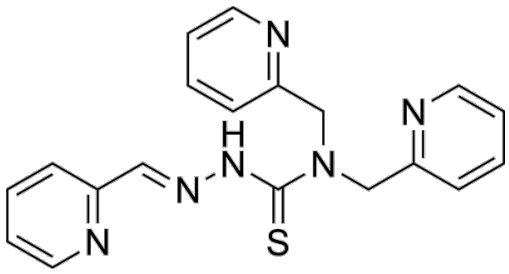
Product Data Sheet

Product Name: NSC 689534
Cat. No.: GC73702

Chemical Properties

Cas. No.	907958-80-9		
Formula	$C_{19}H_{18}N_6S$	M.Wt	362.45
Solubility		Storage	-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

NSC 689534 can form copper chelate with Cu2+. NSC 689534/Cu2+ complex is a potent oxidative stress inducer, and has antitumor activity.

NSC 689534/Cu2+ complex (48 h) inhibits cell viability of HL60 and PC3 cell with IC50s of 0.2 and 0.4 μM respectively, which is about 4 times more potent than NSC 689534 alone[1].NSC 689534/Cu2+ complex (2.5 μM, 24 h) induces oxidative stress and depletes GSH in PC3 cells, whereas with no effect by NSC 689534 alone[1].NSC 689534/Cu2+ complex (2.5 μM, 24 h) induces

macroautophagy (indicated by LC3 accumulation into large autophagosomes) and an ER-stress response (upregulation of GRP78 and CHOP) in PC3 cells[1].

NSC 689534/Cu2+ complex (3 mg/kg, i.p., once or twice a day for 5 days) inhibits tumor growth in HL60 xenograft model, whereas with no statistical significance by NSC 689534 alone[1].

References:
[1]. Chad N Hancock, et al. A copper chelate of thiosemicarbazone NSC 689534 induces oxidative/ER stress and inhibits tumor growth in vitro and in vivo. Free Radic Biol Med. 2011 Jan 1;50(1):110-21.
[2]. Hancock CN, et al. A copper chelate of thiosemicarbazone NSC 689534 induces oxidative/ER stress and inhibits tumor growth in vitro and in vivo. Free Radic Biol Med. 2011 Jan 1;50(1):110-21.