
Product Data Sheet

Product Name: 10-DEBC hydrochloride

Cat. No.: GC13006

Chemical Properties

Cas. No. 925681-41-0

Chemical Name 4-(2-chloro-10H-phenoxazin-10-yl)-N,N-diethylbutan-1-amine hydrochloride

SMILES C1C=CC=C2OC3=CC=CC=C3N(C2=C1)CCCCN(CC)CC.ClFormula $C_{20}H_{25}N_2OCl.HCl$ M.Wt 381.34

Solubility 16mg/mL in ethanol, 12.5mg/mL in DMSO, 5mg/mL in DMF 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**

Akt functions as a key component in multiple signaling pathways to promote cell survival by mediating resistance to apoptosis. Akt inhibitor X is a cell permeable phenoxazine derivative that suppresses insulin-like growth factor 1 (IGF-1)-stimulated phosphorylation of Akt with an IC₅₀ value of 1-2 μM.[1] This compound has been shown to block IGF-1-stimulated nuclear translocation of Akt in Rh1 cells and to inhibit the growth of Rh1, Rh18, and Rh30 cells with IC₅₀ values of 2-5 μM.[1] Inhibition of Akt phosphorylation by 5 μM of this compound strongly correlates to the inhibition of the downstream targets, mTOR, p70S6 kinase, and S6 ribosomal protein and to an increase in apoptosis.[1]

Reference:

[1]. Thimmaiah, K.N., Easton, J.B., Germain, G.S., et al. Identification of N10-substituted phenoxazines as potent and specific inhibitors of Akt signaling. The Journal of Biological

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

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Chemistry 280(36), 31924-31935 (2005).

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