

10-DEBC hydrochloride

1. Description

10-DEBC hydrochloride is a selective inhibitor of Akt/PKB. It inhibits IGF-1-stimulated phosphorylation and activation of Akt (complete inhibition at 2.5 μ M), suppressing downstream activation of mTOR, p70 S6 kinase and S6 ribosomal protein.

2. Product Information

10-DEBC hydrochloride: order-no. PKI-10DEPC-010

Chemical name: 10-[4'-(N,N-Diethylamino)butyl]-2-chlorophenoxazine hydrochloride

Formula: $C_{20}H_{25}N_2OCl \cdot HCl$

Molecular Weight: 381.34 g/mol

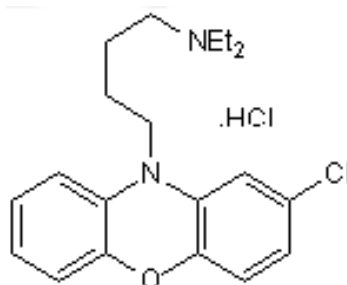
Long Term Storage: +4 $^{\circ}$ C

Purity: >99 %

Appearance: Off white solid

Solubility: Water to 100 mM, DMSO to 100 mM

Structure:



3. Product specific literature references:

- Thimmaiah KN, Horton JK, Seshadri R, Israel M, Houghton JA, Harwood FC, Houghton PJ. (1992) "Synthesis and chemical characterization of N-substituted phenoxazines directed toward reversing vinca alkaloid resistance in multidrug-resistant cancer cells." J. Med. Chem. 35(18):3358-64
- Thimmaiah KN, Easton JB, Germain GS, Morton CL, Kamath S, Buolamwini JK, Houghton PJ. (2005) "Identification of N10-substituted phenoxazines as potent and specific inhibitors of Akt signaling." J. Biol. Chem. 280(36):31924-35.