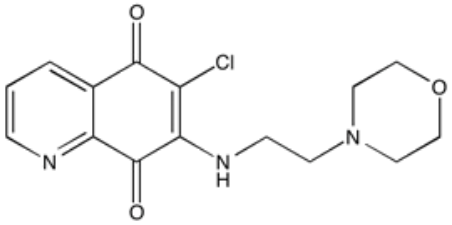
Catalog # 10-1352
NSC-663284
383907-43-5
6-Chloro-7-[[2-(4-morpholinyl)ethyl]amino]-5,8-quinolinedione
Lot# FBA6029



Potent, selective and irreversible inhibitor of CDC25 phosphatases, K_i=29, 95 and 89 nM for human CDC25A, B_2 and C respectively and >20- and >450-fold selective over VHR and PTP1B.[1] Arrests cells at G_1 and G_2/M and inhibits cdk1 and 2 activation.[2] Inhibits the growth of a variety of human tumor cell lines.[3] Acts via irreversible oxidation of the catalytic cysteine of CDC25.[4]

1) Lazo *et al*. (2001), *Discovery and biological evaluation of a new family of potent inhibitors of the dual specificity protein phosphatases Cdc25*; J. Med. Chem., **44** 4042
2) Pu *et al*. (2002), *Dual G1 and G2 phase inhibition by a novel, selective Cdc25 inhibitor 6-chloro-7-(2-morpholin-4-ylethylamino)-quinoline-3,8-dione*; J. Biol. Chem., **277** 46877
3) Han *et al*. (2004), *NAD(P)H:quinone oxidoreductase-1-dependent and –independent cytotoxicity of potent quinone Cdc25 phosphatase inhibitors*; J. Pharmacol. Exp. Ther., **309** 64
4) Brisson *et al*. (2005), *Redox regulation of Cdc25B by cell-active quinolonediones*; Mol. Pharmacol., **68** 1810

PHYSICAL DATA

Molecular Weight:	321.77
Molecular Formula:	$C_{15}H_{16}ClN_3O_3$
Purity:	>98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 15 mg/ml), Ethanol (up to 55 mg/ml)
Physical Description:	Dark Red solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 1 month.

Focus Biomolecules LLC 400 Davis Drive, Suite 600 Plymouth Meeting PA 19462
www.focusbiomolecules.com