



Catalog # 10-2584

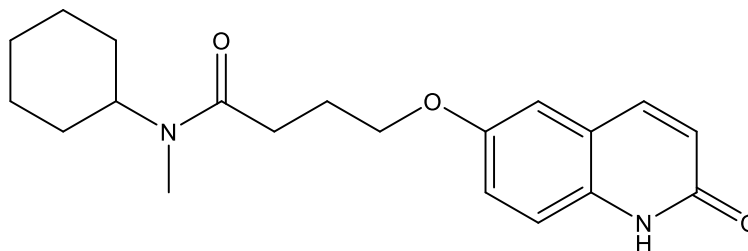
Cilostamide

CAS# 68550-75-4

OPC-3689

N-Cyclohexyl-N-methyl-4-(1,2-dihydro-2-oxo-6-quinolyloxy)butyramide

Lot # X101954



Selective inhibitor of phosphodiesterase-3 (PDE3). Displays limited selectivity for PDE3A versus PDE3B ($IC_{50} = 27$ and 50 nM)^{1,2}. Blocks PKB/Akt signaling pathway downstream via inhibition of Akt-activated PDE3B³. Reverses the effect of leptin on food intake and body weight⁴.

- 1) Hidaka *et al.* (1979), *Selective inhibitor of platelet cyclic adenosine monophosphate phosphodiesterase, cilostamide, inhibits platelet aggregation*; J. Pharmacol. Exp. Ther., **211** 26
- 2) Christensen and Torphy *et al.* (1994), *Isozyme-Selective Phosphodiesterase Inhibitors as Antiasthmatic Agents*; Annu. Rep. Med. Chem., **29** 185
- 3) Ahmad *et al.* (2000), *cyclic nucleotide phosphodiesterase 3B is a downstream target of protein kinase B and may be involved in regulation of effects of protein kinase B on thymidine incorporation in FDCP2 cells*; J. Immunol., **164** 4678
- 4) Zhao *et al.* (2002), *A phosphatidylinositol 3-kinase phosphodiesterase 3B-cyclic AMP pathway in hypothalamic action of leptin on feeding*; Nat. Neuroscience, **5** 727

PHYSICAL DATA

Molecular Weight:	342.44
Molecular Formula:	C ₂₀ H ₂₆ N ₂ O ₃
Purity:	98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (up to 30 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied at room temperature for up to 1 year from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

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