# **Product Information**



## Cilostamide

Item No. 14455

CAS Registry No.: 68550-75-4

N-cyclohexyl-4-[(1,2-dihydro-2-oxo-6-Formal Name:

quinolinyl)oxy]-N-methyl-butanamide

Synonym: OPC 3689 MF:  $C_{20}H_{26}N_2O_3$ FW: 342.4 **Purity:** ≥98%

Stability: ≥2 years at -20°C Supplied as: A crystalline solid UV/Vis.:  $\lambda_{max}$ : 234, 270, 350 nm

## **Laboratory Procedures**

For long term storage, we suggest that cilostamide be stored as supplied at -20°C. It should be stable for at least two

Cilostamide is supplied as a crystalline solid. A stock solution may be made by dissolving the cilostamide in the solvent of choice. Cilostamide is soluble in organic solvents such as dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of cilostamide in DMF is approximately 0.25 mg/ml.

Cilostamide is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Cilostamide is a selective inhibitor of phosphodiesterase (PDE)3A and PDE3B with  $IC_{50}$  values of 27 and 50 nM, respectively.<sup>1</sup> It is less selective for inhibition of PDE1, PDE2, PDE4, PDE5, and PDE7 ( $IC_{50}$ s = 12 to > 300 μM). Cilostamide has been shown to inhibit thrombin-induced platelet aggregation with an IC<sub>50</sub> value of 1.1 μM.<sup>1</sup>

## Reference

1. Sudo, T., Tachibana, K., Toga, K., et al. Potent effects of novel anti-platelet aggregatory cilostamide analogues on recombinant cyclic nucleotide phophodiesterase isozyme activity. Biochem. Pharmacol. 59, 347-56 (2000).

### Related Products

For a list of related products please visit: www.caymanchem.com/catalog/14455

WARNING: This product is for laboratory research only: not for administration to humans. Not for human or veterinary DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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## Cayman Chemical

### **Mailing address**

1180 E. Ellsworth Road Ann Arbor, MI 48108 USA

## **Phone**

(800) 364-9897 (734) 971-3335

(734) 971-3640

custserv@caymanchem.com

www.caymanchem.com