

Product Data Sheet

Product Name: A-3 hydrochloride

Cat. No.: GC60037

Chemical Properties

Cas. No. 78957-85-4

SMILES O=S(C1=C2C=CC=C(Cl)C2=CC=C1)(NCCN)=O.[H]Cl

Formula $C_{12}H_{14}Cl_2N_2O_2S$ M.Wt 321.22

Solubility DMSO: 125 mg/mL (389.14 mM) 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.

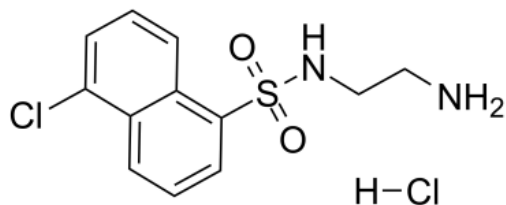
Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

Structure



Background

A-3 hydrochloride is a potent, cell-permeable, reversible, ATP-competitive non-selective antagonist of various kinases. It against PKA ($K_i=4.3 \mu\text{M}$), casein kinase II ($K_i=5.1 \mu\text{M}$) and myosin light chain kinase (MLCK) ($K_i=7.4 \mu\text{M}$). A-3 hydrochloride also inhibits PKC and casein kinase I with K_i values of $47 \mu\text{M}$ and $80 \mu\text{M}$, respectively[1].

A-3 hydrochloride inhibits MLC-kinase competitively with respect to ATP and that the K_i value is $7.4 \mu\text{M}$. A-3 is also a competitive inhibitor of cAMP-dependent protein kinase, cGMP-dependent protein kinase, protein kinase C, casein kinase I, and casein kinase II, with respect to ATP, exhibits K_i values of $4.3 \mu\text{M}$, $3.8 \mu\text{M}$, $47 \mu\text{M}$, $80 \mu\text{M}$, and $5.1 \mu\text{M}$, respectively[1].

[1]. Inagaki M, et al. Naphthalenesulfonamides as calmodulin antagonists and protein kinase

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

inhibitors. Mol Pharmacol. 1986 Jun;29(6):577-81.

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA