

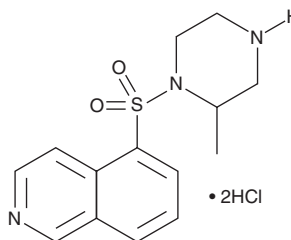
PRODUCT INFORMATION



H-7 (hydrochloride)

Item No. 21434

CAS Registry No.: 108930-17-2
Formal Name: 5-[(2-methyl-1-piperazinyl)sulfonyl]-isoquinoline, dihydrochloride
MF: C₁₄H₁₇N₃O₂S • 2HCl
FW: 364.3
Purity: ≥98%
UV/Vis.: λ_{max}: 217, 274, 323 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

H-7 (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the H-7 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. H-7 (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of H-7 (hydrochloride) in these solvents is approximately 0.25, 10, and 2 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of H-7 (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of H-7 (hydrochloride) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

H-7 is a non-selective inhibitor of protein kinases (PKs; IC₅₀s = 20, 36, 7, and 420 μM for PKC, A, G, and M, respectively).¹ It has been widely used to characterize the functional roles of PKC in a multitude of cellular processes.^{1,2}

References

1. Qatsha, K.A., Rudolph, C., Marmé, D., *et al.* Gö 6976, a selective inhibitor of protein kinase C, is a potent antagonist of human immunodeficiency virus 1 induction from latent/low-level-producing reservoir cells *in vitro*. *Proc. Natl. Acad. Sci. U.S.A.* **90**(10), 4674-4678 (1993).
2. Kumahara, E., Ebihara, T., and Saffen, D. Protein kinase inhibitor H7 blocks the induction of immediate-early genes *zif268* and *c-fos* by a mechanism unrelated to inhibition of protein kinase C but possibly related to inhibition of phosphorylation of RNA polymerase II. *J. Biol. Chem.* **274**(15), 10430-10438 (1999).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/01/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM