

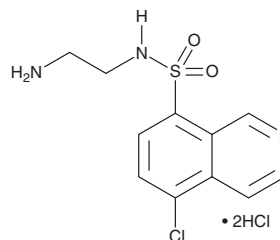
PRODUCT INFORMATION



CKI-7 (hydrochloride)

Item No. 28268

CAS Registry No.: 1177141-67-1
Formal Name: N-(2-aminoethyl)-5-chloro-8-isoquinolinesulfonamide, dihydrochloride
MF: C₁₁H₁₂ClN₃O₂S • 2HCl
FW: 358.7
Purity: ≥98%
Supplied as: A 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

CKI-7 (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the CKI-7 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. CKI-7 (hydrochloride) is slightly soluble in the organic solvent methanol. It is also sparingly soluble in water (warmed). We do not recommend storing the aqueous solution for more than one day.

Description

CKI-7 is an inhibitor of casein kinase 1 (CK1; $K_i = 8.5 \mu\text{M}$).¹ It is selective for CK1 over CK2, PKC, CaM kinase II (CaMKII), and cyclic AMP-dependent protein kinase ($\text{IC}_{50\text{s}} = 90, >1,000, 195, \text{ and } 550 \mu\text{M}$, respectively). CKI-7 inhibits phosphorylation of a peptide substrate by *Leishmania* CK1.2 by 50% when used at a concentration of 10 μM .²

References

- Chijiwa, T., Hagiwara, M., and Hidaka, H. A newly synthesized selective casein kinase I inhibitor, N-(2-aminoethyl)-5-chloroisoquinoline-8-sulfonamide, and affinity purification of casein kinase I from bovine testis. *J. Biol. Chem.* **264**(9), 4924-4927 (1989).
- Rachidi, N., Taly, J.F., Durieu, E., et al. Pharmacological assessment defines *Leishmania donovani* casein kinase 1 as a drug target and reveals important functions in parasite viability and intracellular infection. *Antimicrob. Agents Chemother.* **58**(3), 1501-1515 (2014).

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.

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