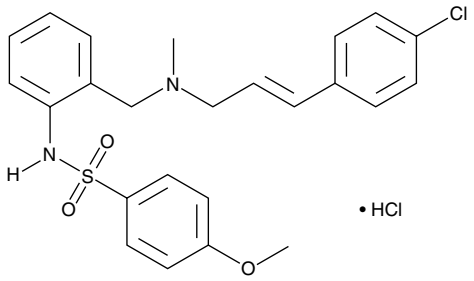
Product Information

KN-92 (hydrochoride)

Item No. 9000890

CAS Registry No.: 1431698-47-3
Formal Name: 2-[N-(4-methoxybenzenesulfonyl)] amino-N-(4-chlorocinnamyl)-N-methylbenzylamine, monohydrochloride
MF: $C_{24}H_{25}ClN_2O_3S \bullet HCl$
FW: 493.4
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ_{max}: 204, 251 nm



Laboratory Procedures

For long term storage, we suggest that KN-92 (hydrochoride) be stored as supplied at -20°C. It should be stable for at least two years.

KN-92 (hydrochoride) is supplied as a crystalline solid. A stock solution may be made by dissolving the KN-92 (hydrochoride) in the solvent of choice. KN-92 (hydrochoride) is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of KN-92 (hydrochoride) in these solvents is approximately 10 mg/ml.

If aqueous stock solutions are required for biological experiments, they can best be prepared by diluting the organic solvent into aqueous buffers or isotonic saline. Ensure that 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.

KN-92 is an inactive derivative of KN-93, the selective inhibitor of Ca^{2+}/calmodulin-dependent kinase type II (CaMKII).[1] At concentrations up to 25 µM, KN-92 is ineffective at inhibiting CaMKII or arresting cell growth of NIH 3T3 fibroblasts.[2] It is intended to be used as a control compound in studies designed to elucidate the antagonist activities of KN-93 (Item No. 13319).

References

1. Sumi, M., Kiuchi, K., Ishikawa, T., *et al.* The newly synthesized selective Ca^{2+}/calmodulin dependent protein kinase II inhibitor KN-93 reduces dopamine contents in PC12th cells. *Biochem. Biophys. Res. Commun.* **181(3)**, 968-975 (1991).
2. Tombes, R.M., Grant, S., Westin, E.H., *et al.* G1 cell cycle arrest and apoptosis are induced in NIH 3T3 cells by KN-93, an inhibitor of CaMK-II (the multifunctional Ca^{2+}/CaM kinase). *Cell Growth Differ.* **6(9)**, 1063-70 (1995).

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