SZABO SCANDIC

Part of Europa Biosite

Produktinformation

- Forschungsprodukte & Biochemikalien
- Zellkultur & Verbrauchsmaterial
- Diagnostik & molekulare Diagnostik
- Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!

Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

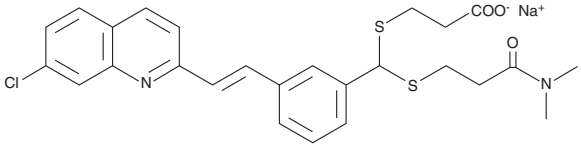
linkedin.com/company/szaboscandic

PRODUCT INFORMATION

MK-571 (sodium salt)

Item No. 70720

CAS Registry No.: 115103-85-0
Formal Name: (E)-3-[[[3-[2-(7-chloro-2-quinolinyl)ethenyl]phenyl][[3-(dimethylamino)-3-oxopropyl]thio]methyl]thio]-propanoic acid, sodium salt
Synonym: L-660,711
MF: $C_{26}H_{26}ClN_2O_3S_2 \bullet Na$
FW: 537.1
Purity: ≥95%
Stability: ≥1 year at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ_{max}: 226, 283, 328, 345, 358 nm



Laboratory Procedures

For long term storage, we suggest that MK-571 (sodium salt) be stored as supplied at -20°C. It should be stable for at least one year.

MK-571 (sodium salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the MK-571 (sodium salt) in an organic solvent purged with an inert gas. MK-571 (sodium salt) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of MK-571 (sodium salt) in ethanol is approximately 1 mg/ml, and it is approximately 10 mg/ml in DMSO and DMF.

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 MK-571 (sodium salt) can be prepared by directly dissolving the crystalline compound in aqueous buffers. The solubility of MK-571 (sodium salt) in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

The cysteinyl leukotrienes (CysLTs), LTC_4, LTD_4, and LTE_4, mediate their actions through two distinct G protein-coupled receptors. LTD_4 is the preferred ligand for the $cysLT_1$ receptor,[1] whereas LTC_4 and LTD_4 bind with approximately equal affinity to the $cysLT_2$ receptor.[2] MK-571 is a selective, orally active $CysLT_1$ receptor antagonist.[3] It blocks the binding of LTD_4, but not LTC_4, to human and guinea pig lung membranes with K_i values of 0.22 and 2.1 nM, respectively, which is indicative of $CysLT_1$ receptor-mediated activity in these preparations.[3] MK-571 effectively blocks LTD_4 activation of recombinant human and mouse $CysLT_1$ receptors[1,4] but is ineffective at blocking LTC_4 or LTD_4 activation of the recombinant human or mouse $CysLT_2$ receptors.[2,4] MK-571 is also a potent inhibitor of the multidrug resistant protein 1 (MRP1).[5,6]

References

1. Lynch, K.R., O'Neill, G.P., Liu, Q., *et al. Nature* **399**, 789-793 (1999).
2. Heise, C.E., O'Dowd, B.F., Figueroa, D.J., *et al. J. Biol. Chem.* **275**, 30531-30536 (2000).
3. Jones, T.R., Zamboni, R., Belley, M., *et al. Can. J. Physiol. Pharmacol.* **67**, 17-28 (1989).
4. Ogasawara, H., Ishii, S., Yokomizo, T., *et al. J. Biol. Chem.* **277(21)**, 18763-18768 (2002).
5. Dallas, S., Zhu, X., Baruchel, S., *et al. J. Pharmacol. Exp. Ther.* **307(1)**, 282-290 (2003).
6. Karwatsky, J., Daoud, R., Cai, J., *et al. Biochemistry* **42**, 3286-3294 (2003).

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