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Lieferung & Zahlungsart

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Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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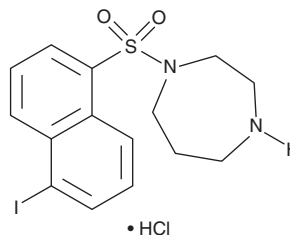
PRODUCT INFORMATION



ML-7 (hydrochloride)

Item No. 11801

CAS Registry No.: 110448-33-4
Formal Name: hexahydro-1-[(5-iodo-1-naphthalenyl) sulfonyl]-1H-1,4-diazepine, monohydrochloride
MF: C₁₅H₁₇IN₂O₂S • HCl
FW: 452.7
Purity: ≥95%
UV/Vis.: λ_{max}: 220, 238, 306 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

ML-7 (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the ML-7 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. ML-7 (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of ML-7 (hydrochloride) in ethanol is approximately 1 mg/ml and approximately 30 mg/ml in DMSO and DMF.

ML-7 (hydrochloride) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ML-7 (hydrochloride) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. ML-7 (hydrochloride) has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

ML-7 inhibits smooth muscle myosin light chain kinase (MLCK) with a K_i value of 0.3 μM and displays reversible, ATP-competitive inhibition of Ca²⁺-calmodulin-dependent and -independent smooth muscle MLCKs.^{1,2} It exhibits a 10-fold more potent inhibition of MLCK than its parent compound ML-9 (Item No. 10010236).^{1,2}

References

1. Saitoh, M., Ishikawa, T., Matsushima, S., *et al.* Selective inhibition of catalytic activity of smooth muscle myosin light chain kinase. *J. Biol. Chem.* **262(16)**, 7796-7801 (1987).
2. Bain, J., McLauchlan, H., Elliot, M., *et al.* The specificities of protein kinase inhibitors: An update. *Biochem. J.* **371(Pt. 1)**, 199-204 (2003).

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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