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## DATASHEET

ML-7 hydrochloride

### Product overview

<b>Name</b>	ML-7 hydrochloride
<b>Cat No</b>	HB0415
<b>Biological action</b>	Inhibitor
<b>Purity</b>	>99%
<b>Description</b>	Selective MLCK inhibitor

### Images



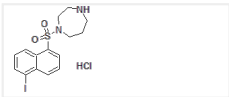
### Biological Data

<b>Biological description</b>	Selective myosin light chain kinase (MLCK) inhibitor ( $K_i = 0.3 \mu\text{M}$ ). Shows reversible ATP- competitive inhibition of $\text{Ca}^{2+}$ calmodulin independent/ dependant smooth muscle MLCK. Approx 10-fold more potent inhibitor than ML-9 Shows antiglaucomatous actions.
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### Solubility & Handling

<b>Storage instructions</b>	room temperature (desiccate)
<b>Solubility overview</b>	Soluble in DMSO (25mM)
<b>Important</b>	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

### Chemical Data

<b>Chemical name</b>	Hexahydro-1-[(5-iodo-1-naphthalenyl)sulfonyl]-1H-1,4-diazepine hydrochloride
<b>Molecular Weight</b>	452.74
<b>Chemical structure</b>	
<b>Molecular Formula</b>	$\text{C}_{15}\text{H}_{17}\text{IN}_2\text{O}_2\text{S}\cdot\text{HCl}$
<b>CAS Number</b>	110448-33-4
<b>PubChem identifier</b>	9803932
<b>SMILES</b>	<chem>C1CNCCN(C1)S(=O)(=O)C2=CC=CC3=C2C=CC=C3I.Cl</chem>
<b>InChIKey</b>	KDDALCDYHZIZMH-UHFFFAOYSA-N

## References

### Selective inhibition of catalytic activity of smooth muscle myosin light chain kinase.

Saitoh M *et al* (1987) J Biol Chem 262(16)

**PubMedID** [3108259](#)

### The specificities of protein kinase inhibitors: an update.

Bain J *et al* (2003) Biochem J 371(Pt 1)

**PubMedID** [12534346](#)

### Effects of ML-7 and Y-27632 on carbachol- and endothelin-1-induced contraction of bovine trabecular meshwork.

Rosenthal R *et al* (2005) Exp Eye Res 80(6)

**PubMedID** [15939040](#)

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