

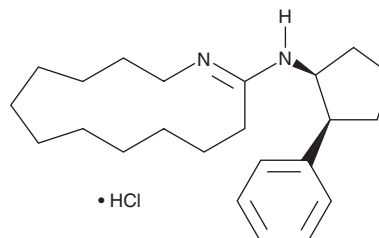
# PRODUCT INFORMATION



## MDL 12330A (hydrochloride)

Item No. 14559

**CAS Registry No.:** 40297-09-4  
**Formal Name:** *rel*-N-[(1R,2R)-2-phenylcyclopentyl]-azacyclo tridec-1-en-2-amine, monohydrochloride  
**Synonym:** RMI 12330A  
**MF:** C<sub>23</sub>H<sub>36</sub>N<sub>2</sub> • HCl  
**FW:** 377.0  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 210 nm  
**Supplied as:** A crystalline 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

MDL 12330A (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the MDL 12330A (hydrochloride) in the solvent of choice. MDL 12330A (hydrochloride) is soluble in organic solvents such as ethanol and dimethyl formamide, which should be purged with an inert gas. The solubility of MDL 12330A (hydrochloride) in these solvents is approximately 1 mg/ml.

### Description

MDL 12330A is an adenylyl cyclase inhibitor that can also inhibit cAMP and cGMP phosphodiesterases and block slow extracellular and store-operated Ca<sup>2+</sup> entry into cells. It is widely used to investigate the role of the adenylyl cyclase/cAMP signaling pathway. MDL 12330A has also been reported to block voltage-dependent K<sup>+</sup> channels, extend action potential duration, and enhance insulin secretion in pancreatic β-cells.<sup>1</sup>

### Reference

1. Li, X., Guo, Q., Gao, J., *et al.* The adenylyl cyclase inhibitor MDL-12,330A potentiates insulin secretion via blockade of voltage-dependent K<sup>+</sup> channels in pancreatic beta cells. *PLoS One* **8(10)**, e77934 (2013).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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#### 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