

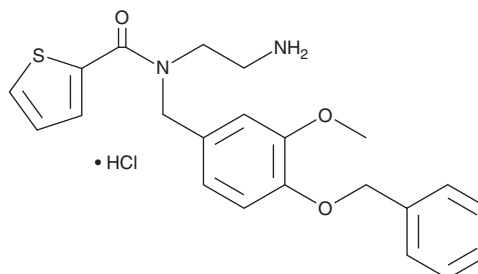
PRODUCT INFORMATION



M8-B (hydrochloride)

Item No. 21646

CAS Registry No.: 883976-12-3
Formal Name: N-(2-aminoethyl)-N-[[3-methoxy-4-(phenylmethoxy)phenyl]methyl]-2-thiophenecarboxamide, monohydrochloride
MF: C₂₂H₂₄N₂O₃S • HCl
FW: 433.0
Purity: ≥98%
UV/Vis.: λ_{max}: 235, 276 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

M8-B (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the M8-B (hydrochloride) in the solvent of choice, which should be purged with an inert gas. M8-B (hydrochloride) is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of M8-B (hydrochloride) in these solvents is approximately 15 and 10 mg/ml, respectively.

M8-B (hydrochloride) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, M8-B (hydrochloride) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. M8-B (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

M8-B is an antagonist of transient receptor potential melastatin 8 (TRPM8) that blocks activation by cold, icilin (Item No. 10137), or menthol *in vitro* (IC₅₀s = 7.8, 26.9, and 64.3 nM, respectively).¹ It displays no effect at other TRP channels. M8-B decreases deep body temperature in wild-type mice and rats but has no effect on body temperature in TRPM8 KO mice.¹

Reference

1. Almeida, M.C., Hew-Butler, T., Soriano, R.N., *et al.* Pharmacological blockade of the cold receptor TRPM8 attenuates autonomic and behavioral cold defenses and decreases deep body temperature. *J. Neurosci.* **32**(6), 2086-2099 (2012).

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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