PRODUCT INFORMATION



Cariporide

Item No. 16935

CAS Registry No.: 159138-80-4

Formal Name: N-(aminoiminomethyl)-4-(1-methylethyl)-3-

(methylsulfonyl)-benzamide

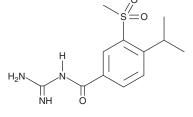
Synonym: **HOE 642** MF: $C_{12}H_{17}N_3O_3S$

283.3 FW: **Purity:** ≥95%

 λ_{max} : 210, 260 nm UV/Vis.: 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

Cariporide is supplied as a crystalline solid. A stock solution may be made by dissolving the cariporide in the solvent of choice, which should be purged with an inert gas. Cariporide is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of cariporide in DMF is approximately 30 mg/ml and approximately 10 mg/ml in ethanol and DMSO.

Description

Cariporide is an inhibitor of sodium-hydrogen exchanger 1 (NHE-1; IC_{50} = 0.56 μ M in an intracellular pH recovery assay). It is selective for NHE-1 over NHE-2 (IC_{50} = 28 μ M in an intracellular pH recovery assay). Cariporide inhibits sodium propionate-induced swelling of isolated human platelets (IC₅₀ = 0.023 μ M). It reduces the myocardial infarct size as a percentage of the area at risk in a rabbit model of ischemia-reperfusion injury induced by coronary artery occlusion when administered at a dose of 1 mg/kg. Cariporide (1 mg/kg) decreases ventricular tachycardia duration in a rat model of coronary artery ligation and reperfusion-induced arrhythmia.²

References

- 1. Tracey, W.R., Allen, M.C., Frazier, D.E., et al. Zoniporide: A potent and selective inhibitor of the human sodium-hydrogen exchanger isoform 1 (NHE-1). Cardiovasc. Drug Rev. 21(1), 17-32 (2003).
- Xue, Y.X., Aye, N.N., and Hashimoto, K. Antiarrhythmic effects of HOE642, a novel Na⁺-H⁺ exchange inhibitor, on ventricular arrhythmias in animal hearts. Eur. J. Pharmacol. 317(2-3), 309-316 (1996).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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