

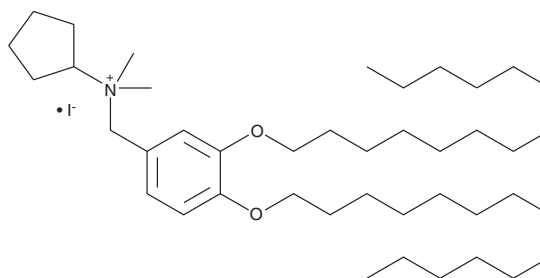
PRODUCT INFORMATION



CAY10614

Item No. 13615

CAS Registry No.: 1202208-36-3
Formal Name: N-cyclopentyl-N,N-dimethyl-3,4-bis(tetradecyloxy)-benzenemethanaminium, iodide
MF: C₄₂H₇₈INO₂
FW: 756.0
Purity: ≥98%
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

CAY10614 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10614 in the solvent of choice, which should be purged with an inert gas. CAY10614 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of CAY10614 in these solvents is approximately 0.14 and 0.15 mg/ml, respectively.

Description

Lipid A is a lipid-rich component of endotoxin, also known as lipopolysaccharide (LPS), which in turn is part of the outer membrane of Gram-negative bacteria. Lipid A activates toll-like receptor 4 (TLR4), initiating an immune response. CAY10614 is an antagonist of lipid A activation of TLR4, exhibiting an IC₅₀ value of 1.68 μM in a cell-based assay using modified human embryonic kidney (HEK) cells.¹ It does not significantly affect HEK cell viability. In a model of sepsis, CAY10614 dramatically and significantly improves survival of mice given intraperitoneal LPS.¹

Reference

1. Piazza, M., Rossini, C., Fiorentina, S.D., *et al.* Glycolipids and benzylammonium lipids as novel antiseptics agents: Synthesis and biological characterization. *J. Med. Chem.* **52(4)**, 1209-1213 (2009).

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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