

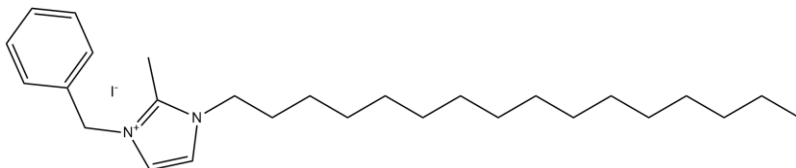
NH125

09/19

ALTERNATE NAMES: 1-benzyl-3-hexadecyl-2-methylimidazol-1-ium,iodide; 1-Benzyl-3-Cetyl-2-Methylimidazolium Iodide; eEF-2 Kinase Inhibitor; 1-Hexadecyl-2-methyl-3-(phenylmethyl)-1H-imidazolium iodide

CATALOG #: B2909-1 1 mg
B2909-5 5 mg

STRUCTURE:



MOLECULAR FORMULA: C₂₇H₄₅IN₂

MOLECULAR WEIGHT: 524.56

CAS NUMBER: 278603-08-0

APPEARANCE: A crystalline solid

PURITY: ≥95%

SOLUBILITY: ~5 mg/ml in Ethanol
~15 mg/ml in DMF
~2.5 mg/ml in DMSO

DESCRIPTION: NH125 is an imidazole that has potent antibacterial properties in drug-resistant bacteria. It inhibits histidine protein kinase YycG with an IC₅₀ of 6.6 μM. It selectively inhibits eEF-2 kinase activity with an IC₅₀ of 60 nM *in vitro* and weakly inhibits PKC, PKA and CaMK II. It also decreases the viability of several cancer cell lines with IC₅₀ values ranging from 0.7-4.7 μM.

STORAGE TEMPERATURE: -20°C. Protect from air. Store under desiccating conditions.

REFERENCES:

1. Yamamoto, K., Kitayama, T., Minagawa, S., et al. Antibacterial agents that inhibit histidine protein kinase YycG of *Bacillus subtilis*. *Bioscience, Biotechnology, and Biochemistry* 65(10), 2306-2310 (2001).
2. Yamamoto, K., Kitayama, T., Ishida, N., et al. Identification and characterization of a potent antibacterial agent, NH125 against drug-resistant bacteria. *Bioscience, Biotechnology, and Biochemistry* 64(4), 919-923 (2000).
3. Arora, S., Yang, J.M., Kinzy, T.G., et al. Identification and characterization of an inhibitor of eukaryotic elongation factor 2 kinase against human cancer cell lines. *Cancer Research* 63, 6894-6899 (2003).

HANDLING: Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

RELATED PRODUCTS:

Foretinib (Cat. No. 9476)
 EZSolution™ Dasatinib (Cat. No. 2029)
 Dasatinib (BMS-354825, Sprycel) (Cat. No. 1586)
 EZSolution™ Cerdulatinib (Cat. No. B2482)
 Regorafenib (Cat. No. 2891)

DISCLAIMER: **FOR RESEARCH USE ONLY! Not to be used on humans.**