

Catalog	Unit
TBI4840-5MG	5 mg
TBI4840-25MG	25 mg

Product Details

Formal Name: 1-Hexadecyl-2-methyl-3-(phenylmethyl)-1H-imidazolium iodide

Molecular Formula: C₂₇H₄₅IN₂

Formula Weight: 524.56

CAS Number: 278603-08-0

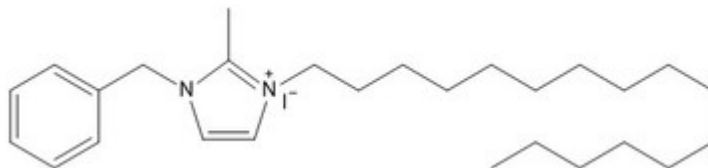
Purity: >98%

Formulation: powder

Solubility: Soluble in DMSO (up to at least 25 mg/ml) or in Ethanol (up to at least 25 mg/ml)

Storage: -20°C

Stability: ≥ 1 year.



Applications

Eukaryotic elongation factor 2 (eEF-2) kinase inhibitor

Functions

NH125 was originally discovered as an antibacterial agent active against various Gram-positive and -negative bacteria via inhibition of histidine protein kinase. It was also found to be a potent inhibitor of eukaryotic elongation factor 2 (eEF-2) kinase (IC₅₀ = 60 nM) with efficacy against a broad spectrum of human cancer cell lines. Other studies have linked the anticancer effects of NH125 to induction of eEF2 phosphorylation. NH125 has also been shown to engage the EIF2a-ATF4-CHOP axis resulting in induction of DR5 expression. Treatment of glioma stem cells with NH125 resulted in a sustained decrease in tumor volume via activation of integrated stress response (ISR) and GADD45 pathways.

Application Procedures

First dissolved in DMSO (up to at least 25 mg/ml) or in Ethanol (up to at least 25 mg/ml), then diluted to aqueous buffer. Solutions in DMSO or ethanol may be stored at -20° for up to 1 month.

For research use only.