

Product Name: NAI-N3

Catalog No.: 7003

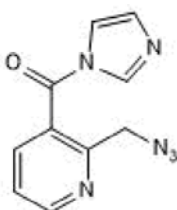
Batch No.: 1

CAS Number: 1612756-29-2

IUPAC Name: [2-(Azidomethyl)-3-pyridinyl]-1*H*-imidazol-1-ylmethanone

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Weight: 228.22
Physical Appearance: Clear liquid
Solubility: Soluble in DMSO (supplied pre-dissolved in DMSO, 1M)
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Description:

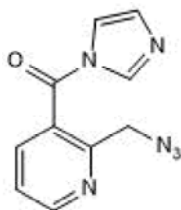
NAI-N3 is a probe for icSHAPE (in vivo click selective 2'-hydroxyl acylation and profiling experiment). Acylates the 2'-OH in ssRNA. Enables RNA structure profiling in vivo and ex vivo for all four bases. NAI-N3 can be used for site-specific RNA acylation using the RAIL (RNA Acylation at Induced Loops) method or in Apta-Seq to discover new aptamers in selected pools.

Physical and Chemical Properties:

Batch Molecular Weight: 228.22

Physical Appearance: Clear liquid

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

Soluble in DMSO (supplied pre-dissolved in DMSO, 1M)

This compound is supplied as a solution in DMSO and may solidify (freeze) during shipping or storage. If this occurs, allow the vial to warm to room temperature without stirring or sonication, using a warm water bath (30°C) if necessary. If any solid material is evident once the solution has fully thawed, the unopened vial should be disposed of. Use only plastic equipment to pipette or handle the solution and wear appropriate PPE.

Stability and Solubility Advice:

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Xiao *et al* (2020) Site-selective RNA functionalization via DNA-induced structure. *J.Am.Chem.Soc.* **142** 16357. PMID: 32865995.

Abdelsayed *et al* (2017) Multiplex aptamer discovery through Apta-Seq and its application to ATP aptamers derived from human-genomic SELEX. *ACS Chem.Biol.* **12** 2149. PMID: 28661647.

Lee *et al* (2017) Comparison of SHAPE reagents for mapping RNA structures inside living cells. *RNA* **23** 169. PMID: 27879433.

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