

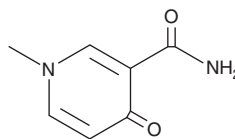
PRODUCT INFORMATION



N-Methyl-4-pyridone-5-carboxamide

Item No. 36684

CAS Registry No.: 769-49-3
Formal Name: 1,4-dihydro-1-methyl-4-oxo-3-pyridinecarboxamide
Synonym: Me4PY
MF: C₇H₈N₂O₂
FW: 152.2
Purity: ≥95%
UV/Vis.: λ_{max}: 269 nm
Supplied as: A 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

N-Methyl-4-pyridone-5-carboxamide is supplied as a solid. A stock solution may be made by dissolving the N-methyl-4-pyridone-5-carboxamide in the solvent of choice, which should be purged with an inert gas. N-Methyl-4-pyridone-5-carboxamide is slightly soluble in ethanol.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of N-methyl-4-pyridone-5-carboxamide can be prepared by directly dissolving the solid in aqueous buffers. The solubility of N-methyl-4-pyridone-5-carboxamide in PBS (pH 7.2) is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

N-Methyl-4-pyridone-5-carboxamide is a metabolite of nicotinic acid and a uremic toxin.^{1,2} Plasma levels of N-methyl-4-pyridone-5-carboxamide are increased and positively correlated with serum levels of malondialdehyde (MDA) in patients with chronic kidney disease (CKD).²

References

1. Chang, M.L.W. and Johnson, B.C. N-Methyl-4-pyridone-5-carboxamide as a metabolite of nicotinic acid in man and monkey. *J. Biol. Chem.* **236**, 2096-2098 (1961).
2. Rutkowski, P., Słominska, E.M., Szołkiewicz, M., *et al.* Relationship between uremic toxins and oxidative stress in patients with chronic renal failure. *Scand. J. Urol. Nephrol.* **41(3)**, 243-248 (2007).

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.

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