

Certificate of Analysiswww.tocris.com**Product Name:** Nicotinamide

CAS Number: 98-92-0

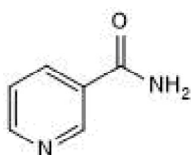
IUPAC Name: Pyridine-3-carboxamide

Catalog No.: 4106

EC Number: 202-713-4

Batch No.: 2**1. PHYSICAL AND CHEMICAL PROPERTIES**

Batch Molecular Formula: C₆H₆N₂O
Batch Molecular Weight: 122.12
Physical Appearance: White solid
Solubility: water to 100 mM
Storage: Store at RT
Batch Molecular Structure:

**2. ANALYTICAL DATA**

HPLC: Shows 99.9% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	59.01	4.95	22.94
Found	59.13	4.96	23.25

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

Product Name: Nicotinamide

Catalog No.: 4106

Batch No.: 2

CAS Number: 98-92-0

EC Number: 202-713-4

IUPAC Name: Pyridine-3-carboxamide

Description:

Nicotinamide is an anti-inflammatory agent. Inhibitor of poly (ADP-ribose) polymerase (PARP-1) enzymes. NAD⁺ precursor. Promotes differentiation of mesenchymal stem cells to insulin producing cells when used in combination with growth factors and high glucose concentration. Nicotinamide also acts as a SIRT1 inhibitor and promotes the expansion of hematopoietic progenitor cells. Nicotinamide can be used in a small molecule cocktail to generate 3D culture of lung alveolar cells. Nicotinamide synthesized to Ancillary Material Grade also available. For more information about how Nicotinamide may be used, see our protocol: 3D Culture of Lung ... Please see product specific page on www.tocris.com for full description.

Physical and Chemical Properties:

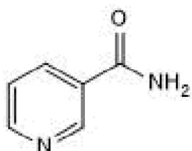
Batch Molecular Formula: C₆H₆N₂O

Batch Molecular Weight: 122.12

Physical Appearance: White solid

Minimum Purity: ≥99%

Batch Molecular Structure:



References:

Bartfeld et al (2015) *In vitro* expansion of human gastric epithelial stem cells and their responses to bacterial infection. *Gastroenterology* **148** 126. PMID: 25307862.

Boj et al (2015) Organoid models of human and mouse ductal pancreatic cancer. *Cell* **160** 324. PMID: 25557080.

Sato et al (2015) SnapShot: Growing organoids from stem cells. *Cell* **161** 1700. PMID: 26091044.

Storage: Store at RT

Solubility & Usage Info:

water to 100 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

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.

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

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel:+1 612 379 2956