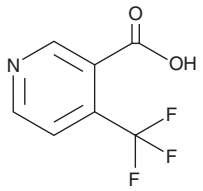
PRODUCT INFORMATION

4-(Trifluoromethyl)nicotinic Acid

Item No. 36479

CAS Registry No.:	158063-66-2
Formal Name:	4-(trifluoromethyl)-3-pyridinecarboxylic acid
Synonym:	TFNA
MF:	$C_7H_4F_3NO_2$
FW:	191.1
Purity:	≥98%
UV/Vis.:	λ_{max}: 267 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

4-(Trifluoromethyl)nicotinic acid (TFNA) is supplied as a solid. A stock solution may be made by dissolving the TFNA in the solvent of choice, which should be purged with an inert gas. TFNA is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of TFNA in these solvents is approximately 25, 10, and 50 mg/ml, respectively.

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 TFNA can be prepared by directly dissolving the solid in aqueous buffers. The solubility of TFNA in PBS (pH 7.2) is approximately 2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

TFNA is a metabolite of the pyridinecarboxamide insecticide flonicamid (Item No. 25608).[1] It is also a synthetic intermediate in the synthesis of carboxamide fungicides.[2]

References

1. Wang, Y., Qin, J., Lu, Q., *et al.* Residue detection and correlation analysis of multiple neonicotinoid insecticides and their metabolites in edible herbs. *Food Chem. X* **17**, 100603 (2023).
2. Yang, Z., Liu, Q., Sun, Y., *et al.* Novel aromatic carboxamides from dehydroabietylamine as potential fungicides: Design, synthesis and antifungal evaluation. *Arabian J. Chem.* **15(12)**, 104330 (2022).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM