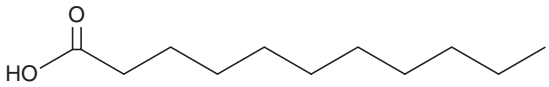
PRODUCT INFORMATION

Undecanoic Acid

Item No. 19721

CAS Registry No.:	112-37-8
Formal Name:	undecanoic acid
Synonyms:	FA 11:0, Hendecanoic Acid, NSC 7885, Undecylic Acid
MF:	$C_{11}H_{22}O_2$
FW:	186.3
Purity:	≥95%
Supplied as:	A crystalline 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

Undecanoic acid is supplied as a crystalline solid. A stock solution may be made by dissolving the undecanoic acid in the solvent of choice, which should be purged with an inert gas. Undecanoic acid is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of undecanoic acid in ethanol and DMF is approximately 25 mg/ml and approximately 10 mg/ml in DMSO.

Undecanoic acid is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, undecanoic acid should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Undecanoic acid has a solubility of approximately 0.25 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Undecanoic acid is a saturated fatty acid containing eleven carbons (C11:0). It is cytotoxic to certain filamentous fungi and is used to study fungal mechanisms of resistance.[1,2] Undecanoic acid is also used to acylate larger molecules.[3]

References

1. Brito-Madurro, A.G., Cuadros-Orellana, S., Martinez-Rossi, N.M., *et al.* Undecanoic acid resistance in filamentous fungi: Identification and linkage mapping of the *Aspergillus nidulans udaA* gene. *J. Gen. Appl. Microbiol.* **51(1)**, 47-49 (2005).
2. Paićo, F.G., Segato, F., Cursino-Santos, J.R., *et al*. Analysis of *Trichophyton rubrum* gene expression in response to cytotoxic drugs. *FEMS Microbiol. Lett*. **271(2)**, 180-186 (2007).
3. Bogatcheva, E., Dubuisson, T., Protopopova, M., *et al*. Chemical modification of capuramycins to enhance antibacterial activity. *J. Antimicrob. Chemother.* **66(3)**, 578-587 (2011).

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