

2-Pyrrolidinone

Catalog No: tcsc0019427



Available Sizes

Size: 1g



Specifications

CAS No:

616-45-5

Formula:

C_4H_7NO

Pathway:

Others

Target:

Others

Purity / Grade:

>98%

Solubility:

10 mM in DMSO

Alternative Names:

2-Pyrrolidone

Observed Molecular Weight:

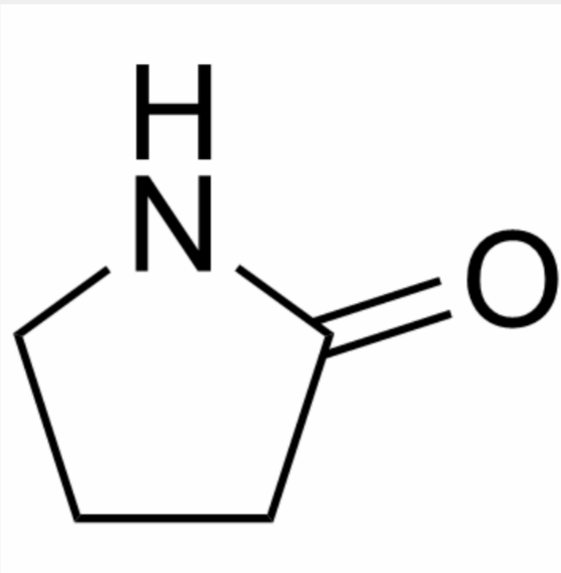
85.1

Product Description

2-Pyrrolidinone is an active compound present in *Brassica oleracea* var. *capitata* and displays anticancer property.

In Vitro: Radical scavenging activity increases with increasing the amount of 2-Pyrrolidinone. The cytotoxicity of 2-Pyrrolidinone is found to be dose and time dependent, and the effect is observed microscopically in all of the selected cancer cell lines. It is observed that 2-Pyrrolidinone has cytotoxic concentrations of 2.5 mg/mL for HeLa, 3 mg/mL for PC-3 cells at 24 h and 1.5 mg/mL for HeLa and

2 mg/mL for PC-3 cells at 48 h, respectively. The cell viability decreases with increasing concentrations of purified 2-Pyrrolidinone. After treatment with 2-Pyrrolidinone their IC_{50} concentrations (1.5 mg/mL and 2 mg/mL for HeLa and PC-3 cells, respectively) for a period of 24 h, morphological changes in the cells are observed. It is demonstrated that 2-Pyrrolidinone induces apoptosis in HeLa and PC-3 cells via G0/G1phase of cell cycle arrest^[1].



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