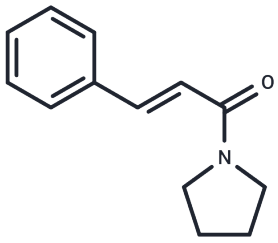
Data Sheet (Cat.No.TN1170)

TargetMol

1-Cinnamoylpyrrolidine

Chemical Properties



CAS No. : 52438-21-8

Formula: C13H15NO

Molecular Weight: 201.26

Storage: Store at low temperature
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	1-Cinnamoylpyrrolidine, a natural product prepared from Piper caninum, can be used as a DNA strand breaking agent, inducing the relaxation of the plasmid pBR322 DNA superhelix in the presence of Cu2+. 1-Cinnamoylpyrrolidine inhibits PAF-induced platelet aggregation with an IC50 value of 37.3 μM. value was 37.3 μM.
Targets(IC50)	Platelet aggregation,DNA/RNA Synthesis,PAFR
In vitro	In a survey of the active components of crude plant extracts for their ability to cleave DNA, a crude extract prepared from Piper caninum was found to induce the relaxation of supercoiled pBR322 plasmid DNA in the presence of Cu(2+). Bioassay-guided fractionation was carried out on this extract, guided by an in vitro DNA strand scission assay. Three active principles were isolated and identified as N-cis-feruloyl tyramine (1), N-trans-feruloyl tyramine (2), and 1-cinnamoylpyrrolidine (3). Compounds 1-3 represent a structurally new type of DNA strand scission agent.[1]

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.9687 mL	24.8435 mL	49.687 mL
5 mM	0.9937 mL	4.9687 mL	9.9374 mL
10 mM	0.4969 mL	2.4843 mL	4.9687 mL
50 mM	0.0994 mL	0.4969 mL	0.9937 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Ma J, et al. Phenolic acid amides: a new type of DNA strand scission agent from Piper caninum. Bioorg Med Chem. 2004;12(14):3885-3889.

Chen IS, et al. Amides with anti-platelet aggregation activity from Piper taiwanense. Fitoterapia. 2007;78(6):414-419.

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