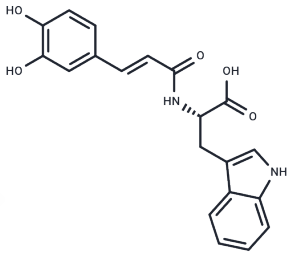
Data Sheet (Cat.No.TN7093)

TargetMol

N-Caffeoyltryptophan

Chemical Properties



CAS No. : 109163-69-1

Formula: C20H18N2O5

Molecular Weight: 366.37

Storage: Keep away from moisture
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	N-Caffeoyltryptophan (trans-Caffeoyl-L-tryptophan), a potential Sirt inhibitor, is screened using coffee extract. N-Caffeoyltryptophan inhibited Sirt2 (IC50; 8.7 μM) better than Sirt1(IC50; 34μM).
Targets(IC50)	Glucosidase,glycosidase,Phosphatase,Sirtuin
In vitro	In cellular levels,N-Caffeoyltryptophan was able to increase the acetylation of total lysine, cortactin and histone H3 in neuronal NG108-15 cells. In the same cells, the amide also increased the acetylation of lysine (K382) in p53, but not (K305)[1].

Solubility Information

Solubility	DMSO: 45 mg/mL (122.83 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (5.46 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.7295 mL	13.6474 mL	27.2948 mL
5 mM	0.5459 mL	2.7295 mL	5.459 mL
10 mM	0.2729 mL	1.3647 mL	2.7295 mL
50 mM	0.0546 mL	0.2729 mL	0.5459 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

Park JB. Finding Potent Sirt Inhibitor in Coffee: Isolation, Confirmation and Synthesis of Javamide-II (N-Caffeoyltryptophan) as Sirt1/2 Inhibitor. PLoS One. 2016 Mar 17;11(3):e0150392.