

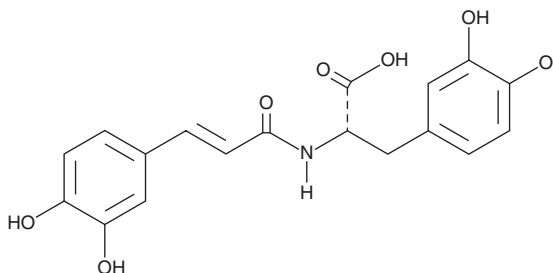
PRODUCT INFORMATION



trans-Clovamide

Item No. 16138

CAS Registry No.: 53755-02-5
Formal Name: N-[(2E)-3-(3,4-dihydroxyphenyl)-1-oxo-2-propen-1-yl]-3-hydroxy-L-tyrosine
Synonyms: N-[3',4'-Dihydroxy-(E)-cinnamoyl]-3-hydroxy-L-tyrosine, *N-trans*-Caffeoyl-L-DOPA
MF: C₁₈H₁₇NO₇
FW: 359.8
Purity: ≥98%
UV/Vis.: λ_{max}: 219, 290, 324 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years
Item Origin: Synthetic



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

trans-Clovamide is supplied as a crystalline solid. A stock solution may be made by dissolving the *trans*-clovamide in the solvent of choice. *trans*-Clovamide is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of *trans*-clovamide in these solvents is approximately 0.3, 25, and 30 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 *trans*-clovamide can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of *trans*-clovamide in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

trans-Clovamide is a naturally occurring caffeoyl conjugate identified in the antioxidant polyphenolic fraction of cocoa (*T. cacao* L.).¹ It has antioxidant and antiradical properties and has shown neuroprotective effects (EC₅₀s = 0.9-3.7 μM) in several *in vitro* models of neuronal death.²

References

1. Alemanno, L., Ramos, T., Gargagenc, A., *et al.* Localization and identification of phenolic compounds in *Theobroma cacao* L. somatic embryogenesis. *Ann. Bot.* **92**(4), 613-623 (2003).
2. Fallarini, S., Miglio, G., Paoletti, T., *et al.* Clovamide and rosmarinic acid induce neuroprotective effects in *in vitro* models of neuronal death. *Br. J. Pharmacol.* **157**(6), 1072-1084 (2009).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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