PRODUCT INFORMATION



N-trans-Feruloyltyramine

Item No. 27459

CAS Registry No.: 66648-43-9

Formal Name: (2E)-3-(4-hydroxy-3-methoxyphenyl)-N-[2-

(4-hydroxyphenyl)ethyl]-2-propenamide

Synonyms: Alfrutamide, (E)-FeruloyItyramine,

Moupinamide

MF: C₁₈H₁₉NO₄ FW: 313.4 **Purity:**

UV/Vis.: λ_{max} : 221, 294, 320 nm Supplied as: A crystalline solid

-20°C Storage: Stability: ≥4 years

Plant/Aristolochia debilis Item Origin:

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

Laboratory Procedures

N-trans-Feruloyltyramine is supplied as a crystalline solid. A stock solution may be made by dissolving the N-trans-feruloyltyramine in the solvent of choice, which should be purged with an inert gas. N-trans-Feruloyltyramine is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of N-trans-feruloyltyramine in ethanol is approximately 25 mg/ml and approximately 30 mg/ml in DMSO and DMF.

N-trans-Feruloyltyramine is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, N-trans-feruloyltyramine should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. N-trans-Feruloyltyramine has a solubility of approximately 0.33 mg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

N-trans-Feruloyltyramine is a phenolic amide originally isolated from S. melongena that has diverse biological activities, including anti-inflammatory, antioxidative, and antiproliferative properties. 1 It decreases nitric oxide (NO) production (IC₅₀ = 17.36 μ M) and inducible NO synthase (iNOS) activity and increases NO scavenging without inducing cytotoxicity in LPS-stimulated BV-2 cells.² It also scavenges 2,2-diphenyl-1-picrylhydrazyl (DPPH; Item No. 14805) radicals in TLC autographic and spectrophotometric assays. N-trans-Feruloyltyramine inhibits proliferation of HeLa and L929 cells by 72.2 and 22%, respectively, when used at a concentration of 30 μg/ml.⁴

References

- 1. Yoshihara, T., Takamatsu, S., and Sakamura, S. Agric. Biol. Chem. 42(3), 623-627 (1978).
- 2. Kim, K.H., Moon, E., Kim, H.K., et al. Bioorg. Med. Chem. Lett. 22(19), 6155-6159 (2012).
- 3. Calvin, A., Hostettmann, K., Dyatmyko, W., et al. Planta Med. 64(5), 393-396 (1998).
- 4. Fang, J.-B., Jia, W., Gao, W.-Y., et al. J. Asian Nat. Prod. Res. 9(6-8), 511-515 (2007).

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

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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