

PRODUCT INFORMATION

N,N'-Diferuloylputrescine

Item No. 41436

CAS Registry No.: 42369-86-8

Formal Name: N,N'-1,4-butanediylbis[3-(4-hydroxy-3-methoxyphenyl)-2-propenamide]

Synonyms: bis-Ferulamidobutane, (E/Z)-Terrestribisamide

MF: C₂₀H₃₄O₅

FW: 354.5

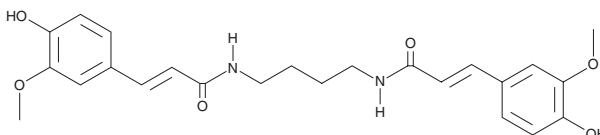
Purity: ≥98%

Supplied as: A crystalline solid

Storage: -20°C

Stability: ≥4 years

Item Origin: Synthetic



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

Laboratory Procedures

N,N'-Diferuloylputrescine is supplied as a crystalline solid. A stock solution may be made by dissolving the N,N'-diferuloylputrescine in the solvent of choice, which should be purged with an inert gas. N,N'-Diferuloylputrescine is soluble (≥10 mg/ml) in DMSO and slightly soluble (0.1-1 mg/ml) in ethanol.

Description

N,N'-Diferuloylputrescine is a polyamine that has been found in *Z. mays* and has diverse biological activities.¹⁻³ It scavenges DPPH (Item No. 14805), superoxide, and hydroxyl radicals in cell-free assays (IC₅₀s = 38.5, 291.6, and 351.9 μM, respectively).¹ N,N'-Diferuloylputrescine inhibits tyrosinase (IC₅₀ = 291.3 μM for the mushroom enzyme) and forskolin-induced pigmentation in B16/F10 melanoma cells when used at a concentration of 50 μg/ml.^{1,2} It inhibits LPS-induced increases in nitric oxide (NO) and inducible nitric oxide synthase (iNOS) levels, as well as NF-κB activity, in RAW 264.7 macrophages when used at a concentration of 50 μM.³

References

- Choi, S.W., Lee, S.K., Kim, E.O., *et al.* Antioxidant and antimelanogenic activities of polyamine conjugates from corn bran and related hydroxycinnamic acids. *J. Agric. Food Chem.* **55**(10), 3920-3925 (2007).
- Kim, M.J., Kim, S.M., Im, K.R., *et al.* Effect of hydroxycinnamic acid derivatives from corn bran on melanogenic protein expression. *J. Korean Soc. Appl. Biol. Chem.* **53**(4), 422-426 (2010).
- Kim, E.O., Min, K.J., Kwon, T.K., *et al.* Anti-inflammatory activity of hydroxycinnamic acid derivatives isolated from corn bran in lipopolysaccharide-stimulated Raw 264.7 macrophages. *Food Chem. Toxicol.* **50**(5), 1309-1316 (2012).

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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