

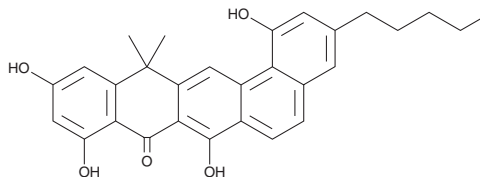
PRODUCT INFORMATION



Benastatin C

Item No. 32894

CAS Registry No.: 150151-88-5
Formal Name: 1,7,9,11-tetrahydroxy-13,13-dimethyl-3-pentyl-benzo[a]naphthacen-8(13H)-one
MF: $C_{29}H_{28}O_5$
FW: 456.5
Purity: $\geq 90\%$
Supplied as: A solid
Storage: -20°C
Stability: ≥ 4 years
Item Origin: Bacterium/*Streptomyces* sp. MI384-DF12



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

Laboratory Procedures

Benastatin C is supplied as a solid. A stock solution may be made by dissolving the benastatin C in the solvent of choice, which should be purged with an inert gas. Benastatin C is soluble in acetone, ethyl acetate, methanol, and DMSO.

Description

Benastatin C is a polyketide synthase-derived benastatin that has been found in *Streptomyces* and has diverse biological activities.^{1,2} It inhibits glutathione S-transferase (GST; $\text{IC}_{50} = 24 \mu\text{g/ml}$ for the rat liver enzyme).² Benastatin C also inhibits the esterase activity of isolated porcine pancreatic lipase ($\text{IC}_{50} = 10 \mu\text{g/ml}$). It increases LPS- or concanavalin A-induced blastogenesis of isolated mouse spleen lymphocytes in a concentration-dependent manner.

References

1. Xu, Z., Schenk, A., and Hertweck, C. Molecular analysis of the benastatin biosynthetic pathway and genetic engineering of altered fatty acid-polyketide hybrids. *J. Am. Chem. Soc.* **129**(18), 6022-6030 (2007).
2. Aoyama, T., Kojima, F., Yamazaki, T., et al. Benastatins C and D, new inhibitors of glutathione S-transferase, produced by *Streptomyces* sp. MI384-DF12. Production, isolation, structure determination and biological activities. *J. Antibiot. (Tokyo)* **46**(5), 712-718 (1993).

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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