

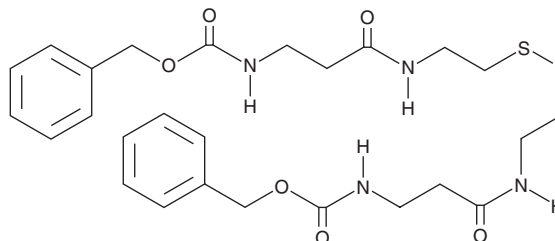
PRODUCT INFORMATION



N,N'-bis-Cbz-β-Alethine

Item No. 20878

CAS Registry No.: 104071-84-3
Formal Name: 5,14-dioxo-9,10-dithia-2,6,13,17-tetrazaoctadecanedioic acid, 1,18-bis(phenylmethyl) ester
Synonym: N,N'-bis-Carboxybenzyl-β-Alethine
MF: C₂₆H₃₄N₄O₆S₂
FW: 562.7
Purity: ≥95%
UV/Vis.: λ_{max}: 204 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

N,N'-bis-Cbz-β-Alethine is supplied as a crystalline solid. A stock solution may be made by dissolving the N,N'-bis-Cbz-β-Alethine in the solvent of choice. N,N'-bis-Cbz-β-Alethine is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of N,N'-bis-Cbz-β-Alethine in these solvents is approximately 2 and 1 mg/ml, respectively.

N,N'-bis-Cbz-β-Alethine is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, N,N'-bis-Cbz-β-Alethine should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. N,N'-bis-Cbz-β-Alethine has a solubility of approximately 0.5 mg/ml in a 1:1 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,N'-bis-Cbz-β-Alethine is an active ester used in the synthesis of β-Alethine, which induces cell differentiation and has potential anti-tumor applications.¹⁻³ β-Alethine is synthesized by removing the carbobenzyloxy (CBZ) groups with hydrogen bromide in glacial acetic acid.¹⁻³

References

1. Knight, G.D., Mann, P.L., and Scallen, T.J. β-Alethine as anti-tumor agent. 5,643,966 (1997), US 08/468,043, Univ. New Mexico.
2. Knight, G.D., Mann, P.L., and Scallen, T.J. β-Alethine use in cell culture and therapy. WO 92/00960 (23.01.92 92/03) (2010), 91912761.3, Univ. New Mexico.
3. Knight, G.D., Mann, P.L., Laubscher, K.H., *et al.* Seemingly diverse activities of β-Alethine. *Cancer Res.* **54**(21), 5636-5642 (1994).

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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