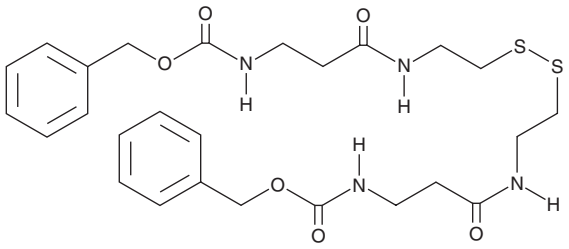
PRODUCT INFORMATION

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-tetraazaoctadecanedioic acid, 1,18-*bis*(phenylmethyl) ester
Synonym:	N,N'-*bis*-Carboxybenzyl-β-Alethine
MF:	$C_{26}H_{34}N_4O_6S_2$
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 carbobenzoxy (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).

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