

PRODUCT INFORMATION

N¹,N¹¹-Diethylnorspermine (hydrochloride)

Item No. 41393

CAS Registry No.: 156886-85-0

Formal Name: N¹,N³-bis[3-(ethylamino)propyl]-1,3-propanediamine, hydrochloride

Synonyms: BE-333, N¹,N¹¹-Bis(ethyl)norspermine, DENSPM

MF: C₁₃H₃₂N₄ • XHCl

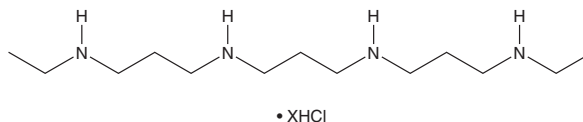
FW: 244.4

Purity: ≥98%

Supplied as: A 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

N¹,N¹¹-Diethylnorspermine (hydrochloride) is supplied as a solid. Aqueous solutions of N¹,N¹¹-diethylnorspermine (hydrochloride) can be prepared by directly dissolving the solid. N¹,N¹¹-Diethylnorspermine (hydrochloride) is soluble (≥10 mg/ml) in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

Description

N¹,N¹¹-Diethylnorspermine is an anticancer polyamine.¹ It inhibits the proliferation of PC3, TSU-pr1, DU145, and JCA-1 prostate cancer cells (IC₅₀s = 65, 62, 3, and 21 μM, respectively). N¹,N¹¹-Diethylnorspermine (100 μM) reduces ornithine decarboxylase (ODC) activity and increases diamine acetyltransferase 1 activity, enzymes involved in polyamine metabolism, in PC3, DU145, and JCA-1 cells. It increases hydrogen peroxide (H₂O₂) levels and disrupts the mitochondrial membrane potential in U87 and LN-229 glioblastoma cells when used at a concentration of 10 μM.² *In vivo*, N¹,N¹¹-diethylnorspermine (40 mg/kg three times per day) decreases tumor growth in a DU145 mouse xenograft model.¹

References

1. Schipper, R.G., Deli, G., Deloyer, P., *et al.* Antitumor activity of the polyamine analog N¹,N¹¹-diethylnorspermine against human prostate carcinoma cells. *Prostate* **44**(4), 313-321 (2000).
2. Jiang, R., Choi, W., Khan, A., *et al.* Activation of polyamine catabolism by N¹,N¹¹-diethylnorspermine leads to cell death in glioblastoma. *Int. J. Oncol.* **31**(2), 431-440 (2007).

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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