

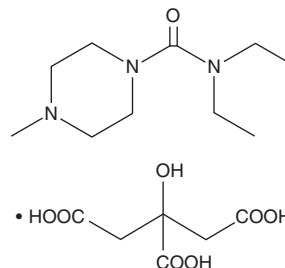
PRODUCT INFORMATION



Diethylcarbamazine (citrate)

Item No. 44221

CAS Registry No.: 1642-54-2
Formal Name: N,N-diethyl-4-methyl-1-piperazinecarboxamide, 2-hydroxy-1,2,3-propanetricarboxylate, monocation
Synonyms: DEC, NSC 80513
MF: $C_{10}H_{21}N_3O \cdot C_6H_8O_7$
FW: 391.4
Purity: $\geq 98\%$
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

Diethylcarbamazine (citrate) is supplied as a solid. A stock solution may be made by dissolving the diethylcarbamazine (citrate) in the solvent of choice, which should be purged with an inert gas. Diethylcarbamazine (citrate) is sparingly soluble (1-10 mg/ml) in DMSO.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of diethylcarbamazine (citrate) can be prepared by directly dissolving the solid in aqueous buffers. Diethylcarbamazine (citrate) soluble (≥ 10 mg/ml) in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

Description

Diethylcarbamazine is an antifilarial agent.^{1,2} *In vivo*, diethylcarbamazine (100 mg/kg) reduces microfilaria levels in *B. pahangi*-infected athymic mice. Formulations containing diethylcarbamazine have been used in the treatment of lymphatic filariasis and loiasis.

References

1. Maizels, R.M. and Denham, D.A. Diethylcarbamazine (DEC): Immunopharmacological interactions of an anti-filarial drug. *Parasitology* **105**, S49-S60 (1992).
2. Peixoto, C.A. and Silva, B.S. Anti-inflammatory effects of diethylcarbamazine: A review. *Eur. J. Pharmacol.* **734**, 35-41 (2014).

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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