# PRODUCT INFORMATION



## N-desmethyl Bendamustine

Item No. 27171

CAS Registry No.: 41515-13-3

6-[bis(2-chloroethyl)amino]-1H-Formal Name:

benzimidazole-2-butanoic acid

Synonym: nor-Bendamustine MF: C<sub>15</sub>H<sub>19</sub>Cl<sub>2</sub>N<sub>3</sub>O<sub>2</sub>

344.2 FW: **Purity:** ≥95% Supplied as: A solid Storage: -20°C Stability: ≥4 years CI

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

### **Laboratory Procedures**

N-desmethyl Bendamustine is supplied as a solid. A stock solution may be made by dissolving the N-desmethyl bendamustine in the solvent of choice, which should be purged with an inert gas. N-desmethyl Bendamustine is soluble in DMSO and in a 1:1 solution of acetonitrile:methanol.

### Description

N-desmethyl Bendamustine is an active metabolite of the DNA alkylating agent bendamustine (Item No. 23693). N-desmethyl Bendamustine is formed through demethylation of the benzimidazole ring in bendamustine by the cytochrome P450 (CYP) isoform CYP1A2. It inhibits proliferation of non-cancerous peripheral blood leukocytes (PBLs;  $IC_{50}$  = 45  $\mu$ M) and SU-DHL-1, SU-DHL-9, and Daudi lymphoma cells  $(IC_{50}s = 270, 170, and 120 \mu M, respectively).$ 

#### Reference

1. Teichert, J., Baumann, F., Chao, Q., et al. Characterization of two phase I metabolites of bendamustine in human liver microsomes and in cancer patients treated with bendamustine hydrochloride. Cancer Chemother. Pharmacol. 59(6), 759-770 (2007).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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.

## WARRANTY AND LIMITATION OF REMEDY

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