

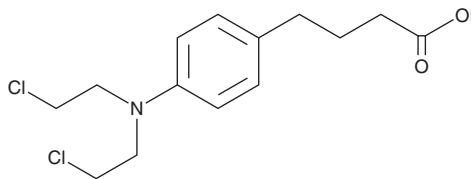
# PRODUCT INFORMATION



## Chlorambucil

Item No. 23744

**CAS Registry No.:** 305-03-3  
**Formal Name:** 4-[bis(2-chloroethyl)amino]-benzenebutanoic acid  
**Synonyms:** CB-1348, NCI 3088, NSC 3088  
**MF:** C<sub>14</sub>H<sub>19</sub>Cl<sub>2</sub>NO<sub>2</sub>  
**FW:** 304.2  
**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

Chlorambucil is supplied as a solid. A stock solution may be made by dissolving the chlorambucil in the solvent of choice, which should be purged with an inert gas. Chlorambucil is slightly soluble in chloroform and methanol.

### Description

Chlorambucil is a DNA alkylating agent.<sup>1</sup> It induces DNA cross-linking *in vitro* when used at a concentration of 1 mg/ml and preferentially targets guanine-rich regions. Chlorambucil (8 and 15 mg/kg) is teratogenic *in vivo*, reducing fetal brain size and inducing microcephaly when administered to pregnant mice.<sup>2</sup> Formulations containing chlorambucil have been used in the treatment of various cancers.

### References

1. Mohamed, D., Mowaka, S., Thomale, J., *et al.* Chlorambucil-adducts in DNA analyzed at the oligonucleotide level using HPLC-ESI MS. *Chem. Res. Toxicol.* **22(8)**, 1435-1446 (2009).
2. Tanaka, O., Yoshioka, N., Yoshioka, T., *et al.* Effects of chlorambucil on the brain development in mice during post-neurulation period *Congenit. Anom. (Kyoto)* **31(3)**, 141-152 (1991).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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