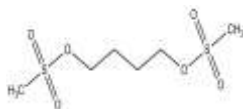


**PRODUCT: Busulfan****ALTERNATE NAME:** 1,4-Butanediol dimethanesulfonate**CATALOG #:** B1063-1G, 5G**AMOUNT:** 1 g, 5 g**STRUCTURE:****MOLECULAR FORMULA:** C<sub>6</sub>H<sub>14</sub>O<sub>6</sub>S<sub>2</sub>**MOLECULAR WEIGHT:** 246.3**CAS NUMBER:** 55-98-1**APPEARANCE:** White solid**SOLUBILITY:** DMSO**PURITY:** ≥97%**STORAGE:** Store at -20 °C. Protect from air and light

**DESCRIPTION:** Busulfan is a bifunctional alkylating agent, having a selective immunosuppressive effect on bone marrow. Busulfan causes DNA damage by cross-linking DNA and proteins. Causes double-base lesions mainly at 5'-GA-3' and, to a lesser extent, at 5'-GG-3' sequences. Forms an intrastrand cross-link at the 5'-GA-3' sequence, and to monoalkylation. Induces normal human fibroblast senescence selectively through Erk and p38 pathways.

**REFERENCE:** Huang, L., *et al.* (2003). *J. Biol.Chem.* **278**, 15532-15540.**HANDLING:** Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.**RELATED PRODUCTS:**Colchicine (**Cat. No. 1519-1000**)Combretastatin A (**Cat. No. 2239-10, 50**)Docetaxel (**Cat. No. 2232-10, 50**)Epothilone B (**Cat. No. 2012-1,5**)Etoposide (**Cat. No. 1043-25Mg, 25MG**)Etoposide phosphate (**Cat. No. 2896-10,50**)Nocodazole (**Cat. No. 2185-10, 50**)Paclitaxel (**Cat. No. 1567-25**)Podophyllotoxin (**Cat. No. 2767-50**)Pseudolaric acid B (**Cat. No. 2512-1, 5**)Tamoxifen Citrate (**Cat. No. 1551-1000**)Vinblastin sulfate (**Cat. No. 1959-5, 25**)Vinorelbine tartrate (**Cat. No. 1957-5, 25**)A771726 (**Cat. No. 1973-5, 25**)Ascomycin (**Cat. No. 1570-2**)Cyclosporin A (**Cat. No. 1522-100, 1G**)(R,S)-Lenalidomide (**Cat. No. 1862-25, 100**)FK506 (**Cat. No. 1563-1,10**)Leflunomide (**Cat. No. 1972-10, 50**)Mycophenolic acid (**Cat. No. 1882-50, 250**)Rapamycin (**Cat. No. 1568-5, 50**)**USAGE:** **FOR RESEARCH USE ONLY! Not to be used in humans**