



DEMECOLCINE

(Product No. D 6279)

Product Information

PRODUCT DESCRIPTION

Often in karyotyping and cell cycle research it is desirable to increase the yield of mitotic cells in a particular phase of the cell cycle. This can be achieved in a variety of ways with the most popular being the use of a cell cycle synchronizing agent such as demecolcine. Demecolcine will arrest cells in metaphase with no remarkable effect on the biochemical events in mitotic cells or in synchronized G1 and S phase cells. White blood cells are often treated with demecolcine to arrest cells in metaphase.

PRODUCT USE

- 1) Reconstitute 1 mg vial demecolcine with 10 ml of sterile balanced salt solution.
- 2) Add reconstituted demecolcine to culture medium at a final concentration of 0.4 µg/ml.
- 3) Incubate cultures for 4-6 hours at 37°C.
- 4) Remove medium containing Demecolcine, replace with fresh medium.

PRODUCT STORAGE

Store Demecolcine at 2-8°C. After reconstitution, it may be stored at 2-8°C or frozen in aliquots at -20°C. Prolonged storage and repeated freezing and thawing are not recommended.

REFERENCES

1. Jakoby, W. and Pastan, I. (1979). *Methods in Enzymology*. 58:314, 352, 345-367, 448-449.
2. Kruse, P. and Patterson, M. (1973). *Tissue Culture Methods and Applications*. Academic Press, New York, NY. p. 471.
3. Hansen, D. and Stadler, J. (1977). Increased Polyethylene Glycol-Mediated Fusion Competence in Mitotic Cells of a Mouse Lymphoid Cell Line. *Somatic Cell Genetics*. 3(5):471-482.
4. Miyahara, M. et al. (1984). Colcemid Treatment of Myeloma Prior to Cell Fusion Increases the Yield of Hybrids Between Myeloma and Splenocyte. *Biochem. and Biophys. Research Comm.* 124(3):903-908.