



细胞松弛素B

Laboratory Procedures

Cytochalasin B is supplied as a crystalline solid. A stock solution may be made by dissolving the cytochalasin in the solvent of choice. Cytochalasin B is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of cytochalasin B in ethanol and DMSO is approximately 20 mg/ml, and in DMF it is approximately 30 mg/ml.

Cytochalasin B is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, cytochalasin B should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Cytochalasin B has a solubility of approximately 0.05 mg/ml in a 1:20 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Cytochalasin B is a cell-permeable mycotoxin which binds to the barbed end of actin, reversibly inhibiting the elongation and shortening of actin filaments.¹ By disrupting actin polymerization, cytochalasin B locks diverse cellular functions, including cell division, migration, phagocytosis, exocytosis, chemotaxis, and glucose transport.²⁻⁴ Cytochalasin B is broadly used in cytological studies involving any of these many processes that depend on actin polymerization.⁵⁻⁷

References

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