Docetaxel

1 mg

**Background:** Docetaxel belongs to the taxane family of antitumor and antileukemic agents (1). A microtubule-stabilizing agent, docetaxel acts as an inhibitor of cellular functions that require microtubule dynamics including cell division, and is now in use as a treatment for breast, prostate and lung cancer (2).

**Molecular Formula:** C_{43}H_{53}NO_{14}

**Molecular Weight:** 807.89 g/mol

**Directions for Use:** Docetaxel is supplied as 1 mg powder. Store at or below -20°C. Before use, dissolve powder in 1 ml DMSO to make a 1 mg/ml stock solution. The suggested working concentration is 100 ng/ml in tissue culture medium. Treat cells with the desired concentration for 4-24 hours. Store solution at -20°C.

**Background References:**

**Storage:** Store lyophilized or in solution at -20°C, desiccated. In lyophilized form, the chemical is stable for 24 months. Once in solution, use within 3 months to prevent loss of potency. Aliquot to avoid multiple freeze/thaw cycles.