

TREVIGEN® Product Data

For Research Use Only. Not For Use In Diagnostic Procedures

Etoposide

Catalog #: 4886-400-01

Size: 400 µl

Description: Etoposide complexes with topoisomerase II and DNA to enhance double-strand and single-strand cleavage of DNA and reversibly inhibit religation. Etoposide also blocks the cell cycle in S-phase and G2-phase; induces apoptosis in normal and tumor cell lines; inhibits synthesis of the oncoprotein Mdm2 and induces apoptosis in tumor lines that overexpress Mdm2.

Formula weight: 588.56

Physical State: Etoposide is provided in DMSO. The final reagent concentration is 25 mM.

Storage: Store at -20 °C, shielded from light and with desiccant. For extended storage, freeze in working aliquots in a manual defrost freezer to avoid freeze-thaws.

Bring to room temperature before use.

Applications: Induction of apoptosis *in vitro*. To induce apoptosis, dilute etoposide in media to a final concentration ranging from 10 µM to 100 µM. The concentration and length of treatment are cell type dependant and require optimization. Please refer to MSDS before handling this product.

References:

1. Chow, K.C., and Ross, W.E., 1987. Topoisomerase-specific drug sensitivity in relation to cell cycle progression. *Mol. Cell Biol.*, **7**:3119-3123.
2. Fearnhead HO, M. Chwalinski , R.T. Snowden, M.G. Ormerod, GM.Cohen.1994. Dexamethasone and etoposide induce apoptosis in rat thymocytes from different phases of the cell cycle. *Biochem Pharmacol* **48**:1073-9.
3. Burden, D.A., et al., 1996. Topoisomerase II-etoposide interactions direct the formation of drug-induced enzyme-DNA cleavage complexes. *J. Biol. Chem.*, **271**:29238-29244.
4. Hande, K.R. 1998. Etoposide: four decades of development of a topoisomerase II inhibitor. *Eur.J. Cancer*, **34**:1514-1521.
5. Kaufmann, S.H., 1998. Cell death induced by topoisomerase-targeted drugs: more questions than answers. *Biochim. Biophys. Acta*, **1400**:195-211.

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