

TREVIGEN[®] Product Data

For Research Use Only. Not For Use In Diagnostic Procedures

Staurosporine

Catalog #: 4886-100-02

Size: 100 μ l

Description: Staurosporine is a phospholipid/calcium-dependent protein kinase inhibitor that prevents ATP binding. This antibiotic (also known as AM2282 and M193) is used to induce apoptosis in a wide range of experimental models. The optimal concentration of staurosporine used and treatment times are cell type dependent and will require optimization for the system under study. An example is provided below in Applications.

Source: Streptomyces sp.

Formula weight: 466.5

Physical State: Staurosporine is provided in DMSO. The final reagent concentration is 1 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.

Applications: Induction of apoptosis *in vitro*.

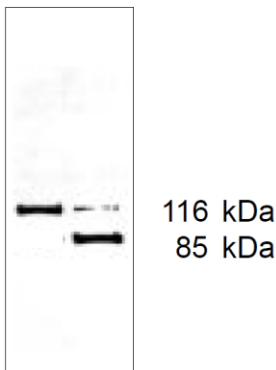


Fig 1.

Western blot analysis of PARP cleavage in apoptotic HL60 cells. A) untreated HL60 cells B) HL60 cells treated with 1 μ M staurosporine for 6 hours to induce apoptosis. The 116 kDa band corresponds to full length PARP and the 85 kDa band is the apoptotic cleavage product were detected using anti-PARP C2-10 (cat#4338-MC-50).

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References:

1. Tamaoki, T., H. Nomoto, I. Takahashi, Y. Kato, M. Morimoto, F. Tomita. 1986. Staurosporine, a potent inhibitor of phospholipid/Ca²⁺ dependent protein kinase. *Biochem Biophys Res Commun.* **135**: 397-402.
2. Lamarre, D., B. Talbot, G. de Murcia, C. Laplante, Y. Leduc, A. Mazen and G.G. Poirier 1988. Structural function analysis of poly(ADP-ribose) polymerase: an immunological study. *Biochim. Biophys. Acta* **950**:147-160.
3. Omura S., Y. Iwai, A. Hirano, A. Nakagawa, J. Awaya, H. Tsuchya, Y. Takahashi, R. Masuma. 1977. A new alkaloid AM-2282 OF *Streptomyces* origin. Taxonomy, fermentation, isolation and preliminary characterization. *J Antibiot (Tokyo)*. **30**:275-82.
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