

Camptothecin (Mappia foetida) PRODUCT DATA SHEET

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Product Name: Camptothecin (Mappia foetida)

Product Number: C145

CAS Number: 7689-03-4

Molecular Formula: $C_{20}H_{16}N_2O_4$

Molecular Weight: 348.352

Appearance: Light yellow crystalline powder

Source: Nothapodytes foetida

Storage Conditions: 2-8 °C

Description: Camptothecin is an alkaloid topoisomerase I (topo I) inhibitor with anticancer

properties. Camptothecin is isolated from Mappia foetida; a fungus.

This product is considered a dangerous good. Quantities above 1 g may be

subject to additional shipping fees. Please contact us for specific questions.

Mechanism of Action:

Camptothecin inhibits DNA religation in the cleavage/religation step by

binding to DNA topoisomerase I (topo I) and DNA which forms a DNA topoisomerase I - camptothecin - DNA complex. This complex causes DNA

damage and leads to apoptosis.

Cancer Applications Camptothecin has poor water solubility and several camptothecin analogs and

derivatives have been synthesized in an attempt to improve water solubility,

bioavailability, and lactone stability.

References: Venditto, Vincent J. "Cancer Therapies Utilizing the Camptothecins: A Review

of the in Vivo Literature." American Chemical Society (2010): 307-49. Web.

If you need any help, contact us: info@toku-e.com. Find more information on: www.toku-e.com/