Product Name: 4'-Demethylepipodophyllotoxin

Revision Date: 6/30/2018

Product Data Sheet

Chemical Properties

- **Product Name:** 4'-Demethylepipodophyllotoxin
- **Cas No.:** 6559-91-7
- **M.Wt:** 400.38
- **Formula:** C21H20O8
- **Synonyms:** 4'-O-demethylepipodophyllotoxin; 4'-DMEP
- **Chemical Name:** 6-oxo-1H-pyrazine-3-carboxylic acid
- **Canonical SMILES:** COC1=CC(=CC(=C1O)OC)C2C3C(COC3=O)C(C4=CC5=C(C=C24)OCO5)O
- **Solubility:** ≥83.3mg/mL in DMSO
- **Storage:** Store at -20°C
- **General tips:** For obtaining a higher solubility, please warm the tube at 37°C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.
- **Shopping Condition:** Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request

Biological Activity

- **Targets:** DNA Damage/DNA Repair
- **Pathways:** Topoisomerase
- **Description:** IC50 Value: 0.31uM (EC50 for HL60 cell, MTT assay, 48h); 0.37uM (EC50 for HepG2 cell, MTT assay, 48h) [1] 4'-demethylepipodophyllotoxin is a key intermediate compounds for the preparation of podophyllotoxin-type anti-cancer drugs. In vitro: 4-TMP-DMEP showed strong cytotoxicity activity against the above-mentioned five tumor cell lines. The EC50s of 4-TMP-DMEP
against these tumor cell lines ranged from 0.24 to 0.11 μM, which were 0.29 to 3618 times lower than that of DMEP [1]. in vivo: Treatment of animals with DMEP (until the end of the experiment), 30 min before TPA treatment, significantly reduced the tumor incidence, tumor volume and the conversion efficiency of papillomas to squamous cell carcinomas. The tumor formation and growth was also delayed by DMEP pre-treatment [2]. Clinical trial: N/A

Reference:

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most ApexBio products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short term storage of many products are stable in the short-term at temperatures that differ from those required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.