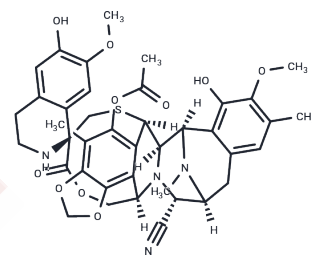


Ecteinascidin 770

Chemical Properties

| | |
|-------------------|---|
| CAS No. : | 114899-80-8 |
| Formula: | C ₄₀ H ₄₂ N ₄ O ₁₀ S |
| Molecular Weight: | 770.85 |
| Appearance: | no data available |
| Storage: | store at low temperature, keep away from moisture Powder: -20°C for 3 years In solvent: -80°C for 1 year |



Biological Description

| | |
|----------------------------|--|
| Description | Ecteinascidin 770 (ET-770) inhibits U373MG cells and is a 1,2,3, 4-tetrahydroisoquinoline alkaloid with strong anticancer activity. IC ₅₀ is 4.83 nM. |
| Targets(IC ₅₀) | Others |
| In vitro | ET-770 (Ecteinascidin 770) significantly enhances the anoikis response in human lung cancer H23 and H460 cells by activating p53 protein. This activation leads to the down-regulation of anti-apoptotic myeloid cell leukemia sequence-1 (MCL1) and up-regulation of BCL2-associated X protein (BAX), while B-cell lymphoma-2 (BCL2) proteins remain largely unaffected. Additionally, ET-770 induces apoptosis in U373MG glioblastoma cells, with an IC ₅₀ value of 4.83 nM after a 72-hour treatment, as determined by the MTT assay. The IC ₅₀ values for HCT116, QG56, and DU145 human cell lines are found to be 0.6, 2.4, and 0.81 nM, respectively, showcasing its apoptotic effectiveness across various cell types in a dose-dependent manner. |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|-------|-----------|-----------|------------|
| 1 mM | 1.2973 mL | 6.4863 mL | 12.9727 mL |
| 5 mM | 0.2595 mL | 1.2973 mL | 2.5945 mL |
| 10 mM | 0.1297 mL | 0.6486 mL | 1.2973 mL |
| 50 mM | 0.0259 mL | 0.1297 mL | 0.2595 mL |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

- Tabunoki H, et al. Molecular network profiling of U373MG human glioblastoma cells following induction of apoptosis by novel marine-derived anti-cancer 1,2,3,4-tetrahydroisoquinoline alkaloids. *Cancer Cell Int.* 2012 Apr 11;12(1):14.
- Saktrakulka P, et al. Chemistry of ecteinascidins. Part 3: preparation of 2'-N-acyl derivatives of ecteinascidin 770 and evaluation of cytotoxicity. *Bioorg Med Chem.* 2011 Aug 1;19(15):4421-36.
- Powan P, et al. Ecteinascidin 770, a tetrahydroisoquinoline alkaloid, sensitizes human lung cancer cells to anoikis. *Anticancer Res.* 2013 Feb;33(2):505-12.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only. Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:36 Washington Street,Wellesley Hills,MA 02481