**Product Data Sheet**

### Chemical Properties

- **Product Name:** Cepharanthine
- **Cas No.:** 481-49-2
- **M.Wt:** 606.71
- **Formula:** C37H38N2O6

### Chemical Name:

- **Canonical SMILES:** `CN1CCC2=CC3=C(C4=CC1C5C(C=C5)O6=C(C=CC(C6)CC7C8=CCC(C=C8CCN7COC)OC)OC)OCO3`

### Solubility:

- $\geq 21.9$ mg/mL in DMSO

### Storage:

- Store at $-20^\circ$C

### General tips:

- For obtaining a higher solubility, please warm the tube at $37^\circ$C and shake it in the ultrasonic bath for a while. Stock solution can be stored below $-20^\circ$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:** Nature Products
- **Pathways:**
- **Description:**

  IC50: 90 microM for the antiperoxidant potency
  Cepharanthine is a biscoclaurine alkaloid extracted from Stephania cepharantha Hayata, which is widely used for the treatment of many acute and chronic diseases. The extract of Stephania cepharantha Hayata contains biscoclaurine alkaloids such as cepharanthine, which have been used widely for the treatment of radiation-induced leukopenia.
In vitro: Cepharanthine was found to exert antitumor effects by augmenting the immunological responses of the host, or by exerting apoptosis-inducing effects [1].

In vivo: Combined therapy of cepharanthine and S-1 (a new oral antineoplastic agent) showed antitumor effects on human OSCC xenografts and induced apoptotic cells in tumors significantly. Immunohistochemistry results showed TS and DPD expressions down-regulated and OPRT expression up-regulated in tumors treated with cepharanthine plus S-1 [2].

Clinical trial: In order to examine the clinical efficacy of cepharanthin for preventing chemotherapy-caused leuakopenia in lung cancer patients, a randomized trial was carried out. The results suggested that administration of cepharanthin had an obvious antileukopenic effect in anticancer treatment, which made it possible to reduce the period of risk for infection and allow effective regimens to be repeatedly administered in a shorter interval [3].

Reference:

Product Citations

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 that 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.