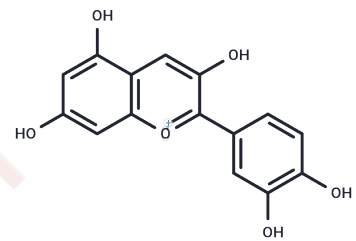


Cyanidin

Chemical Properties

| | |
|-------------------|--|
| CAS No. : | 13306-05-3 |
| Formula: | C ₁₅ H ₁₁ O ₆ |
| Molecular Weight: | 287.24 |
| Storage: | Keep away from direct sunlight Powder: -20°C for 3 years In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small> |



Biological Description

| | |
|---------------|--|
| Description | Cyanidin is an antioxidant compound extracted from plants. It scavenges free radicals, inhibits xanthine oxidase activity, and protects DNA from cleavage. |
| Targets(IC50) | ROS |
| In vitro | Cyanidin may have anticancer effects by inhibiting (RAS, MAPK) and activating (caspase-3 and P-38) molecular pathways. [1] Cyanidin can inhibit the activity of matrix metalloproteinase (MMP2/9) and fibronectin 1 (Fn1). [2] Cyanidin plays an antitumor role in glioma stem cell lines. [3] |
| In vivo | Oral administration of Cyanidin (30 mg/kg) for 4 weeks improved cardiac function and reduced myocardial damage in mice after myocardial infarction. Cyanidin can prevent cardiomyocyte apoptosis. [2] |

Solubility Information

| | |
|------------|--|
| Solubility | DMSO: 81.67 mg/mL (284.33 mM) (< 1 mg/ml refers to the product slightly soluble or insoluble) |
|------------|--|

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|-------|-----------|-----------|------------|
| 1 mM | 3.4814 mL | 17.407 mL | 34.8141 mL |
| 5 mM | 0.6963 mL | 3.4814 mL | 6.9628 mL |
| 10 mM | 0.3481 mL | 1.7407 mL | 3.4814 mL |
| 50 mM | 0.0696 mL | 0.3481 mL | 0.6963 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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Safdar MA, et al. Cyanidin as potential anticancer agent targeting various proliferative pathways. *Chem Biol Drug Des.* 2023 Feb;101(2):438-452.

Gang D, Qing O, et al. Cyanidin prevents cardiomyocyte apoptosis in mice after myocardial infarction. *Naunyn Schmiedebergs Arch Pharmacol.* 2024 Aug;397(8):5883-5898.

Xue Z, et al. Cyanidin inhibits glioma stem cells proliferation through the Wnt signaling pathway. *Int J Neurosci.* 2024 Aug;134(8):858-865.

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:34 Washington Street,Wellesley Hills,MA 02481