

## 4,4'-Methylenediphenol

## Chemical Properties

CAS No.:	620-92-8
Formula:	C <sub>13</sub> H <sub>12</sub> O <sub>2</sub>
Molecular Weight:	200.23
Appearance:	N/A
Storage:	0-4°C for short term (days to weeks), or -20°C for long term (months).

## Biological Description

Description	4,4'-Methylenediphenol is a high purity product from Gastrodia rhizome.
Targets(IC <sub>50</sub> )	Others: None
In vitro	Gastrodia rhizome, a dried and steamed tuber of <i>Gastrodia elata</i> Blume (Orchidaceae), has been traditionally used in Korea, China and Japan for the treatment of neurological and nervous disorders such as headaches, dizziness, vertigo and convulsive illnesses. The ethyl acetate and water extracts of <i>G. elata</i> stimulated plasmin activity. METHODS AND RESULTS: The active ethyl acetate fraction was subjected to centrifugal partition chromatography (CPC) with a two-phase solvent system, composed of n-hexane-ethyl acetate-methanol-water (3:7:4:6, v/v) followed by semi-preparative HPLC purification to separate active compounds and the water fraction was purified by Diaion HP-20 resin and semi-preparative HPLC. In ethyl acetate extract, 4-hydroxybenzyl alcohol (1), 4-hydroxybenzoic acid (2), 4-hydroxybenzaldehyde (3), 4-ethoxymethylphenol (4), 4,4'-oxybis(methylene)diphenol (5) and 4,4'-Methylenediphenol (6) were obtained with high purities. Parishin (7) and parishin B (8) were isolated from water extract. CONCLUSIONS: Among isolated compounds, 4-hydroxybenzyl alcohol (1), 4-hydroxybenzaldehyde (3) and 4-ethoxymethylphenol (4) significantly stimulated plasmin activity.

## Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble
------------	---

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.994 mL	24.971 mL	49.943 mL
5 mM	0.999 mL	4.994 mL	9.989 mL
10 mM	0.499 mL	2.497 mL	4.994 mL
50 mM	0.100 mL	0.499 mL	0.999 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

## Reference

1. Preparative purification of plasmin activity stimulating phenolic derivatives from *Gastrodia elata* using centrifugal partition chromatography. Biomed Chromatogr. 2016 Jun;30(6):976-82.

Inhibitors · Natural Compounds · Compound Libraries

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

Tel:781-999-4286

E-mail:[info@targetmol.com](mailto:info@targetmol.com)

Address:36 Washington Street,Wellesley Hills,MA 02481