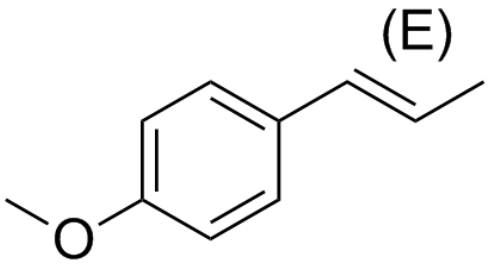
# Product Data Sheet

Product Name: Trans-Anethole ((E)-Anethole)
Cat. No.: GC32428

## Chemical Properties

| | | | |
|---|---|---|---|
| Cas. No. | 4180-23-8 | | |
| SMILES | COC1=CC=C(/C=C/C)C=C1 | | |
| Formula | $C_{10}H_{12}O$ | M.Wt | 148.2 |
| Solubility | DMSO: 100 mg/mL (674.76 mM); Water: 1 mg/mL (6.75 mM; ultrasonic and warming and heat to 80°C) | 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. | | |
| Shipping Condition | Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request. | | |
| Structure | | | |




## Background

Trans-Anethole ((E)-Anethole), a phenylpropene derivative isolated from Pimpinella, shows estrogenic activity at lower concentrations and cytotoxic at higher concentrations in cancer cell lines[1][2]. Trans-Anethole ((E)-Anethole) contributes a large component of the odor and flavor of

anise and fennel, anise myrtle, liquorice, camphor, magnolia blossoms, and star anise[3].

[1]. Tabanca N, et al. Estrogenic activity of isolated compounds and essential oils of Pimpinella species from Turkey, evaluated using a recombinant yeast screen. Planta Med. 2004 Aug;70(8):728-35. [2]. Nakagawa Y, et al. Cytotoxic and xenoestrogenic effects via biotransformation of trans-anethole on isolated rat hepatocytes and cultured MCF-7 human breast cancer cells. Biochem Pharmacol. 2003 Jul 1;66(1):63-73. [3]. Fahlbusch, et al. "Flavors and Fragrances", Ullmann's Encyclopedia of Industrial Chemistry, Weinheim: Wiley-VCH.

***Caution: Product has not been fully validated for medical applications. For research use only.***
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