

## beta-Asarone Datasheet

5<sup>th</sup> Edition (Revised in January, 2017)

### [ Product Information ]

**Name:** beta-Asarone

**Catalog No.:** CFN98870

**Cas No.:** 5273-86-9

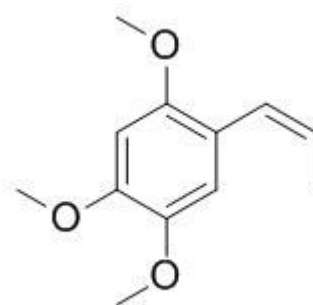
**Purity:** > 95%

**M.F:** C<sub>12</sub>H<sub>16</sub>O<sub>3</sub>

**M.W:** 208.3

**Physical Description:** Oil

**Synonyms:** (Z)-1,2,4-Trimethoxy-5-(1-propenyl)benzene; 1,2,4-Trimethoxy-5-[(1Z)-1-propen-1-yl]benzol.



### [ Intended Use ]

1. Reference standards;
2. Pharmacological research;
3. Synthetic precursor compounds;
4. Intermediates & Fine Chemicals;
5. Others.

### [ Source ]

The herbs of *Asarum sieboldii* Miq.

### [ Biological Activity or Inhibitors ]

beta-Asarone has neuroprotection, it can afford a beneficial inhibition on both mRNA and protein expression of Bad, Bax, and cleavage of caspases 9 in rat hippocampus following intrahippocampal injections of Abeta (1-42), it may be a potential candidate for development as a therapeutic agent for Alzheimer's disease.<sup>[1]</sup>

beta-Asarone has anthelmintic activity using contractility of *Ascaridia galli*., it shows potent activity with IC<sub>50</sub> values of 75.4 +/- 61.8 ng/mL.<sup>[2]</sup>

beta-Asarone has anticoagulant effect in the mouse and the rat. <sup>[3]</sup>

beta Asarone can cause liver and cardiac damages, it also has reproductive toxicity, beta asarone administered at a dose of 50mg/kg b.wt. is capable enough in bringing about moderate amount of degenerative changes in rat testis and altered antioxidant status.<sup>[4]</sup>

beta-Asarone can inhibit colon cancer formation in vivo and in vitro by inducing senescence, since beta-asarone induces lamin B1 expression, a model is proposed in which beta-asarone inhibits colorectal cancer by inducing senescence through lamin B1.<sup>[5]</sup>

## **[ Solvent ]**

Chloroform, Dichloromethane, Ethyl Acetate, DMSO, Acetone, etc.

## **[ HPLC Method ]<sup>[6]</sup>**

Mobile phase: Acetonitrile- H<sub>2</sub>O=48:52 ;

Flow rate: 1.0 ml/min;

Column temperature: Room Temperature;

The wave length of determination: 303 nm.

## **[ Storage ]**

2-8°C, Protected from air and light, refrigerate or freeze.

## **[ References ]**

[1] Liu J, Li C, Xing G, *et al. Yakugaku zasshi.*, 2010, 130(5):737-46.

- [2] Kumar R, Prakash O, Pant A K, *et al. Nat. Prod. Commun.*, 2009, 4(2):275-8.
- [3] Rubio-Póo C, Lemini C, García-Mondragón J, *et al. Proc. West. Pharmacol. Soc.*, 1991, 34:107-12.
- [4] Benny B, George P D C, Thirumal K D, *et al. Life Sci.*, 2016, S0024-3205(16)30492-1.
- [5] Liu L, Wang J, Shi L, *et al. Phytomedicine*, 2013, 20(6):512-20.
- [6] Chen C, Spriano, D, Meier, B. *Planta Med.*, 2009, 75(13):1448-52.

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