β-Asarone  
*Item No. 11682*  

**CAS Registry No.:** 5273-86-9  
**Formal Name:** 1,2,4-trimethoxy-5-(1Z)-1-propen-1-yl-benzene  
**Synonym:** cis-Asarone  
**MF:** C_{12}H_{16}O_{3}  
**FW:** 208.3  
**Purity:** ≥98%  
**Stability:** ≥1 year at -20°C  
**Supplied as:** A solution in ethanol  
**UV/Vis.:** λ_{max}^* 209, 253, 303 nm  

**Laboratory Procedures**  

For long term storage, we suggest that β-asarone be stored as supplied at -20°C. It should be stable for at least one year.  

β-Asarone is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of β-asarone in these solvents is approximately 50, 10, and 15 mg/ml, respectively.  

β-Asarone is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the DMF solution of β-asarone should be diluted with the aqueous buffer of choice. β-Asarone has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.  

**Description**  

The asarones, including α-asarone (Item No. 11681) and β-asarone, were first isolated from volatile oils of plants of the genus Acorus, which are used in Ayurvedic medicine. β-Asarone is noted for its neuroprotective effects, as it ameliorates depression, reduces dopamine-induced neurotoxicity, and attenuates damage in a model of stroke.  

In isolated neurons and in brains, β-asarone blocks autophagy, reduces inflammation, and inhibits apoptosis. While β-asarone inhibits apoptosis in neurons, it induces apoptosis in colon cancer cells.  

It also has antimicrobial effects.  

**References**  