

# **Syringaresinol Datasheet**

4<sup>th</sup> Edition (Revised in July, 2016)

# [ Product Information ]

Name: Syringaresinol

Catalog No.: CFN92060

Cas No.: 487-35-4

**Purity:** > 95%

M.F: C<sub>22</sub>H<sub>26</sub>O<sub>8</sub>

M.W: 418.4

Physical Description: Powder

**Synonyms:**4,4'-(Tetrahydro-1H,3H-furo[3,4-c]furan-1,4-diyl)bis[2,6-dimethoxyphenol].

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#### [ Intended Use ]

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

#### [Source]

The branch of Liriodendron chinensis.

### [ Biological Activity or Inhibitors]

(+)-Syringaresinol from unripe Japanese apricot has inhibition of Helicobacter pylori

motility at a concentration of 500 microg/ml and the IC50 value was 50 microg/ml. [1]

(-)-Syringaresinol and tricin show inhibitory effects on the P-glycoprotein in adriamycin-

resistant human breast cancer cells, MCF-7/ADR.[2]

(-)-Syringaresinol can potently inhibit the proliferation of human promyelocytic HL-60 cells

through G(1) arrest and induction of apoptosis, suggests that (-)-syringaresinol may be a

potential chemotherapeutic agent for the treatment of cancer.[3]

Syringaresinol induces vasorelaxation by enhancing NO production in endothelial cells via

two distinct mechanisms, phosphatidylinositol 3-kinase/Akt- and (PLC)/Ca2+/CaMKKβ-

dependent eNOS phosphorylation and Ca(2+)-dependent eNOS dimerization. [4]

#### [Solvent]

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

#### [ HPLC Method ]<sup>[5]</sup>

Mobile phase: Acetonitrile- H2O, gradient elution;

Flow rate: 1.0 ml/min;

Column temperature: Room Temperature;

The wave length of determination: 220 nm.

## [Storage]

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

### [References]

[1] Miyazawa M, Utsunomiya H, Inada K, et al. Biol. Pharmaceut. Bull., 2006, 29(1):172-3.

[2] Yeon Hee Jeong, Soo Yeon Chung, Ah Reum Han, et al. Chem. Biodivers., 2007, 4(1):

12-6.

[3] Park B Y, Oh S R, Ahn K S, et al. Int. Immunopharmacol., 2008, 8(7):967-73.

[4] Chung B H, Kim S, Kim J D, et al. Exp. Mol. Med., 2011, 44(3):191-201.

[5] Jiao Z H, Gu X Y, Yang X Y. Chinese Journal of Information on Traditional Chinese Medicine, 2007, 14(8):50-1.

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