

Amygdalin Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Amygdalin

Catalog No.: CFN98373

Cas No.: 29883-15-6

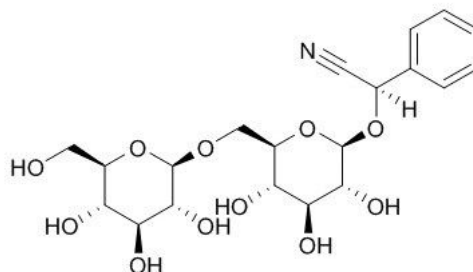
Purity: 98%

M.F: C₂₀H₂₇NO₁₁

M.W: 457.4

Physical Description: Powder

Synonyms: D-Mandelonitrile-6-O-β-D-glucosido-β-D-glucoside; D-Mandelonitrile-β-gentio bioside.



[Intended Use]

1. Reference standards;
2. Pharmacological research;
3. Food and cosmetic research;
4. Synthetic precursor compounds;
5. Others.

[Source]

The kernel of *Prunus armeniaca* L.

[Biological Activity or Inhibitors]

Amygdalin induces apoptotic cell death in human DU145 and LNCaP prostate cancer cells by caspase-3 activation through down-regulation of Bcl-2 and up-regulation of Bax, suggests it may offer a valuable option for the treatment of prostate cancers.^[1]

Amygdalin suppresses the prostaglandin E(2) synthesis and the nitric oxide production by inhibiting the LPS-stimulated mRNA expressions of COX-2 and iNOS in the mouse BV2 cells, suggests that it exerts anti-inflammatory and analgesic effects and it dose so probably by suppressing the mRNA expressions of COX-2 and iNOS.^[2]

Amygdalin can inhibit genes related to cell cycle in SNU-C4 human colon cancer cells.^[3]

[Solvent]

DMSO, Ethanol, Methanol, Pyridine, Hot water.

[HPLC Method]^[4]

Mobile phase: Methanol: 0.03 M Phosphate buffer (pH 2.8)= 25:75;

Flow rate: 1.0 ml/min;

Column temperature: 30 °C;

The wave length of determination: 210 nm.

[Storage]

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

[References]

[1] Chang H K, Shin M S, Yang H Y, *et al. Biol. Pharm. Bull.*, 2006, 29(8):1597-602.

[2] Yang H Y, Chang H K, Lee J W, *et al. Neurol. Res.*, 2013, 29, 1(1):59-64.

[3] Park H J, Yoon S H, Han L S, *et al. World J. Gastroentero*, 2005, 11(33):5156-61.

[4] Zhou C, Chen K, Sun C, *et al. Biomed. Chromatogr.*, 2007, 21(7):755-61.

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