

# (+)-Afzelechin Datasheet

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

### [ Product Information ]

Name: (+)-Afzelechin

Catalog No.: CFN98280

Cas No.: 2545-00-8

**Purity:** > 95%

**M.F:** C<sub>15</sub>H<sub>14</sub>O<sub>5</sub>

M.W: 274.27

Physical Description: Powder

**Synonyms:** (2R)-2  $\alpha$  -(4-Hydroxyphenyl)chroman-3  $\beta$  ,5,7-triol;

[2R,3S,(+)]-3,4-Dihydro-2-(4-hydroxyphenyl)-2H-1-benzopyran-3,5,7-triol.

#### [ Intended Use ]

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

#### [Source]

The herbs of Celastrus orbiculatus.

#### [ Biological Activity or Inhibitors]

(+)-Afzelechin has a neuroprotective effect on the glutamate-induced neurotoxicity in

HT22 cells, it has ABTS cation radical scavenging effects with IC50 values of 23.7 microM,

suggests that it could be neuroprotectants owing to their free radical scavenging activities.

[1]

(+)-Afzelechin has inhibitory compound of alpha-glucosidase activity, the ID(50) (50%

inhibition dose) value is 0.13 mM.[2]

(+)-Afzelechin shows moderate to strong radical scavenging properties against

diphenylpicrylhydrazyl radical (DPPH) and improves the reduced glutathione levels in rat

pancreatic homogenate.[3]

#### [Solvent]

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

#### [ HPLC Method ]<sup>[4]</sup>

Mobile phase: Acetonitrile- H2O, gradient elution;

Flow rate: 1.0 ml/min;

Column temperature: Room Temperature;

The wave length of determination: 200 nm.

#### [Storage]

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

#### [ References ]

[1] Li G, Min B S, Zheng C, et al. Arch. Pharm. Res., 2005, 28(7):804-9.

[2] Saijyo J, Suzuki Y, Okuno Y, et al. J. Oleo Sci., 2008, 57(8):431-5.

[3] Narváez-Mastache J M, Novillo F, Delgado G. Phytochemistry, 2008, 69(2):451-6.

[4] Reddy U D C, Chawla A S, Deepak M, et al. Phytochem. Analysis, 1999, 10(1):44-7.

## [ Contact ]

Address:

S5-3 Building, No. 111, Dongfeng Rd.,

Wuhan Economic and Technological Development Zone,

Wuhan, Hubei 430056,

China

Email: info@chemfaces.com

**Tel:** +86-27-84237783 **Fax:** +86-27-84254680

Web: www.chemfaces.com

Tech Support: service@chemfaces.com