**Natural Products** 



Cyanidin-3-O-galactoside chloride Datasheet

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

#### [Product Information]

Name: Cyanidin-3-O-galactoside chloride

Catalog No.: CFN92040

Cas No.: 27661-36-5

**Purity:** > 95%

**M.F:** C<sub>21</sub>H<sub>21</sub>ClO<sub>11</sub>

**M.W:** 484.9

Physical Description: Powder

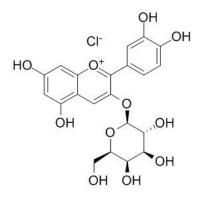
Synonyms: Cyanidin 3-galactoside; Idein; Idaein.

## [ Intended Use ]

- 1. Reference standards;
- 2. Pharmacological research;
- 3. Synthetic precursor compounds;
- 4. Intermediates & Fine Chemicals;
- 5. Ingredient in supplements, beverages;
- 6. Cosmetic research;
- 7. Others.

### [Source]

The fruits of Vaccinium myrtillus



#### [Biological Activity or Inhibitors]

Cyanidin-3-O-galactoside is a flavonoid-enriched extract derived from the peel of Northern Spy apples, has neuroprotective effects, can reduce HI-induces brain injury and motor deficits by increasing the resistance of vulnerable neurons to ischemiccell death and decreasing the production of inflammatory cytokines.<sup>[1]</sup>

Cyanidin-3-O-galactoside and blueberry extracts were shown effective functions to relieve cellular injury, improve hippocampal neurons survival and inhibit the pyramidal cell layer damage; also increases SOD activity and reduces MDA content in brain tissues and plasma, and increased hippocampal phosphorylated ERK (p-ERK) expression in SAMP8 mice; thus, cyanidin-3-O-galactoside and blueberry extracts supplementation can improve spatial memory and regulates hippocampal ERK expression in senescence-accelerated mice.<sup>[2]</sup>

Cyanidin-3-O-galactoside has antioxidant activity in the reduction of the stable DPPH radical and in the inhibition of lipid peroxidation.<sup>[3]</sup>

### [Solvent]

Pyridine, Methanol, Ethanol, Hot water, etc.

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

Mobile phase: 0.1%Fomic acid in water- 0.1%Fomic acid in methanol, gradient elution; Flow rate: 1.0 ml/min; Column temperature: 25 °C; The wave length of determination: 530 nm.

## [ Storage ]

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

# [ References ]

[1] Dunlop K E. *DalSpace Home. 2012, 11.20.* 

[2] Tan L, Yang H P, Pang W, et al. Biomed. Environ. Sci., 2014, 27(3):186-96.

[3] Giomaro G, Karioti A, Bilia A R, et al. Chem. Cent. J., 2014, 8(1):1-10.

[4] Ha T J, Lee M H, Yu N J, et al. Food Sci. Biotechnol., 2010, 19(3):821-6.

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