

# 8-O-Acetylshanzhiside methyl ester Datasheet

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

## [ Product Information ]

Name: 8-O-Acetylshanzhiside methyl ester

Catalog No.: CFN98966

Cas No.: 57420-46-9

**Purity:** > 98%

M.F: C<sub>19</sub>H<sub>28</sub>O<sub>12</sub>

M.W: 448.4

Physical Description: Powder

**Synonyms:**(1S,4aS,5R,7S,7aS)-7-acetyloxy-5-hydroxy-7-methyl-1-[[(2S,3R,4S,5S,6R)-3, 4,5-trihydroxy-6-(hydroxymethyl)-2-oxanyl]oxy]-4a,5,6,7a-tetrahydro-1H-cyclopenta[c]pyr an-4-carboxylic acid methyl ester.

## [ Intended Use ]

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

## [Source]

The herb of Lamiophlomis rotata (Benth.) Kudo.

[ Biological Activity or Inhibitors]

8-O-acetyl shanzhiside methylester (ND01), an iridoid glucoside compound, was isolated

from the leaves of Lamiophlomis rotata (Benth.) Kudo, ND01 has potential against

cerebral ischemic injury, and its protective effect on oxygen-glucose deprivation-induced

injury might be due to the suppression of intracellular Ca<sup>2+</sup> elevation and caspase-3

activity, and improvement of mitochondrial energy metabolism.[1]

8- O -acetyl Shanzhiside Methylester can increases angiogenesis and improve functional

recovery after stroke.[2]

8-O-acetyl shanzhiside methylester has protective effects on experimental myocardial

ischemia injury, the effects might be due to block of myocardial inflammatory cascades

through an HMGB1-dependent NF-kB signaling pathway.[3]

8-O-acetyl shanzhiside methylester protects diabetic brain against I/R injury by alleviating

diabetic cerebral I/R injury and attenuating blood-brain barrier (BBB) breakdown, and its

protective effects may involve HMGB-1 and NF-kB signalling pathway.[4]

[Solvent]

Pyridine, DMSO, Ethanol, Methanol.

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

Mobile phase: Acetonitrile: H2O, gradient elution;

Flow rate: 1.0 ml/min;

Column temperature: 35 °C;

The wave length of determination: 235 nm.

[Storage]

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

#### [References]

- [1] Jiang W L, Fu F H, Zheng S G, et al. Eur. J. Pharmacol., 2010, 629(629):20-4.
- [2] Jiang W L, Zhang S P, Zhu H B, et al. Basic Clin. Pharmacol., 2011, 108(1):21-7.
- [3] Kang Z C, Jiang W L, Xu Y, et al. Eur. J. Pharm. Sci. Official J. Eur. Federat Pharm. Sci., 2012, 47(1):124-30.
- [4] Zhang L, Kan Z C, Zhang X L, et al. Basic Clin. Pharmacol., 2014, 115(6):481-7.
- [5] Liao L D, Tang C, Lu S M, et al. Res. Practi on Chinese Med., 2011(05):70-2.

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