

## Gypenoside XVII Datasheet

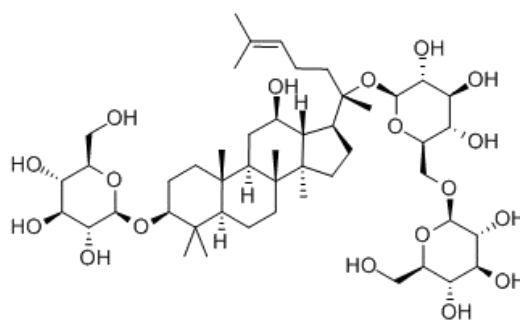
4<sup>th</sup> Edition (Revised in July, 2016)**[ Product Information ]****Name:** Gypenoside XVII**Catalog No.:** CFN90193**Cas No.:** 80321-69-3**Purity:** >=98%**M.F:** C<sub>48</sub>H<sub>82</sub>O<sub>18</sub>**M.W:** 947.16**Physical Description:** White powder**Synonyms:** Gynosaponin S;

3beta-(beta-D-Glucopyranosyloxy)-12beta-hydroxy-5alpha-dammar-24-en-20-yl

6-O-beta-D-glucopyranosyl-beta-D-glucopyranoside;

(3beta,12beta)-3-(beta-D-Glucopyranosyloxy)-12-hydroxydammar-24-en-20-yl

6-O-beta-D-glucopyranosyl-beta-D-glucopyranoside.

**[ Intended Use ]**

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

**[ Source ]**

The roots of *Panax notoginseng* (Burk.) F.H.Chen.

### **[ Biological Activity or Inhibitors ]**

Gypenoside XVII (GP-17) is a novel phytoestrogen isolated from *Gynostemma pentaphyllum* or *Panax notoginseng*, GP-17 confers protection against A $\beta$  25-35-induced neurotoxicity through estrogen receptor-dependent activation of PI3K/Akt pathways, inactivation of GSK-3 $\beta$  and activation of Nrf2/ARE/HO-1 pathways, this finding might provide novel insights into understanding the mechanism for neuroprotective effects of phytoestrogens or gypenosides.<sup>[1]</sup>

Gypenoside XVII enhances lysosome biogenesis and autophagy flux and accelerates autophagic clearance of Amyloid- $\beta$  through transcription factor EB (TFEB) activation, it ameliorates amyloid- $\beta$  (A $\beta$ )<sub>25-35</sub>-induced apoptosis in PC12 cells by regulating autophagy, demonstrates that GP-17 conferred protective effects to the cellular and rodent models of Alzheimer's disease by activating TFEB.<sup>[2]</sup>

### **[ Solvent ]**

Pyridine, Methanol, Ethanol, etc.

### **[ HPLC Method ]<sup>[3]</sup>**

Mobile phase: Acetonitrile - H<sub>2</sub>O, gradient elution ;

Flow rate: 1.6 ml/min;

Column temperature: Room Temperature;

The wave length of determination: 203 nm.

### **[ Storage ]**

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

### **[ References ]**

[1] Meng X, Wang M, Sun G, *et al. Toxicol. Appl. Pharmacol.*, 2014, 279(1):63-75.

[2] Meng X, Luo Y, Liang T, *et al. J. Alzheimer Dis. Jad*, 2016 Apr 5;52(3):1135-50.

[10] Cheng L Q, Na J R, Kim M K, *et al. J.Microbiol. Biotech.*, 2007, 17(12):1937-43.

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