

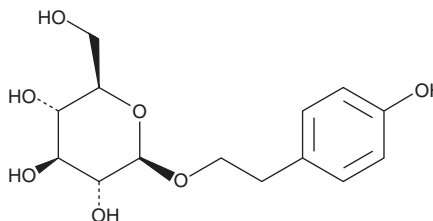
# PRODUCT INFORMATION



## Salidroside

Item No. 13628

**CAS Registry No.:** 10338-51-9  
**Formal Name:** 2-(4-hydroxyphenyl)ethyl-β-D-glucopyranoside  
**Synonym:** Rhodioloside  
**MF:** C<sub>14</sub>H<sub>20</sub>O<sub>7</sub>  
**FW:** 300.3  
**Purity:** ≥97%  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Salidroside is supplied as a crystalline solid. A stock solution may be made by dissolving the salidroside in the solvent of choice, which should be purged with an inert gas. Salidroside is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of salidroside in these solvents is approximately 3, 20, and 30 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of salidroside can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of salidroside in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

Salidroside is a glycoside that has been found in *R. rosea* and has diverse biological activities, including antioxidant, anti-apoptotic, neuroprotective, and anti-inflammatory properties.<sup>1-5</sup> It scavenges 2,2-diphenyl-1-picrylhydrazyl (DPPH; Item No. 14805) and ABTS (Item No. 27317) radicals with EC<sub>50</sub> values of 81.54 and 30.94 μg/ml, respectively, in cell-free assays.<sup>2</sup> Salidroside (50 and 100 μM) inhibits apoptosis and production of reactive oxygen species (ROS) induced by amyloid-β (25-35) (Aβ (23-35)) in SH-SY5Y neuroblastoma cells.<sup>3</sup> It decreases infarct volume by 17.9% in a rat model of focal cerebral ischemia-reperfusion injury induced by transient middle cerebral artery occlusion (MCAO) when administered at a dose of 12 mg/kg.<sup>4</sup> Salidroside (20, 50, and 100 mg/kg, p.o.) increases survival and reduces plasma alanine aminotransferase (ALT), aspartate aminotransferase (AST), TNF-α, and malondialdehyde (MDA) levels in a mouse model of liver injury induced by acetaminophen (Item No. 10024).<sup>5</sup>

### References

1. Ma, C., Tang, J., Wang, H., *et al.* *J. Sep. Sci.* **32**, 185-191 (2009).
2. Wang, H., Gan, D., Zhang, X., *et al.* *LWT Food Sci. Technol.* **43(2)**, 319-325 (2010).
3. Zhang, L., Yu, H., Zhao, X., *et al.* *Neurochem. Int.* **57(5)**, 547-555 (2010).
4. Shi, T.-y., Feng, S.-f., Xing, J.-h., *et al.* *Neurotox. Res.* **21(4)**, 358-367 (2012).
5. Wu, Y.-L., Piao, D.-M., Han, X.-H., *et al.* *Biol. Pharm. Bull.* **31(8)**, 1523-1529 (2008).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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