

# PRODUCT INFORMATION

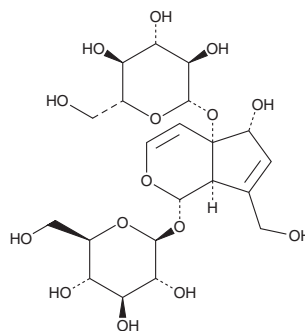


## Melittoside

Item No. 29035

**CAS Registry No.:** 19467-03-9  
**Formal Name:** (1S,4aS,5R,7aR)-5,7a-dihydro-5-hydroxy-7-(hydroxymethyl)cyclopenta[c]pyran-1,4a(1H)-diyl bis-β-D-glucopyranoside

**MF:** C<sub>21</sub>H<sub>32</sub>O<sub>15</sub>  
**FW:** 524.5  
**Purity:** ≥98%  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years  
**Item Origin:** Plant/*Rehmanniae Radix*



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

### Laboratory Procedures

Melittoside is supplied as a crystalline solid. Aqueous solutions of melittoside can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of melittoside in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

Melittoside is an iridoid glycoside that has been found in *S. trojana* and has antioxidant and enzyme inhibitory activities.<sup>1,2</sup> It scavenges free radicals in a Trolox equivalent antioxidant capacity (TEAC) assay.<sup>1</sup> Melittoside also inhibits the activity of acetylcholinesterase (AChE) and butyrylcholinesterase (BChE) by 24.6 and 12.8%, respectively, when used at a concentration of 250 µg/ml in a cell-free assay.<sup>2</sup>

### References

1. Kirmizibekmez, H., Ariburnu, E., Masullo, M., *et al.* Iridoid, phenylethanoid and flavonoid glycosides from *Sideritis trojana*. *Fitoterapia* **83(1)**, 130-136 (2012).
2. Kirmizibekmez, H., Erdoğan, M., Kúsz, N., *et al.* Secondary metabolites from the aerial parts of *Sideritis germanicopolitana* and their *in vitro* enzyme inhibitory activities. *Nat. Prod. Res.* (2019).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 11/21/2022

#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897  
[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM