

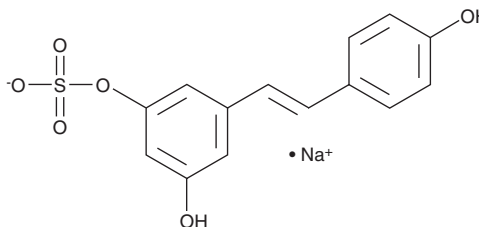
PRODUCT INFORMATION



Resveratrol-3-O-Sulfate (sodium salt)

Item No. 14942

CAS Registry No.: 858127-11-4
Formal Name: 5-[(1E)-2-(4-hydroxyphenyl)ethenyl]-1,3-benzenediol, 1-(hydrogen sulfate), monosodium salt
MF: C₁₄H₁₁O₆S • Na
FW: 330.3
Purity: ≥95%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Resveratrol-3-O-sulfate (sodium salt) is supplied as a solid. A stock solution may be made by dissolving the resveratrol-3-O-sulfate (sodium salt) in the solvent of choice, which should be purged with an inert gas. Resveratrol-3-O-sulfate (sodium salt) is slightly soluble in DMSO.

Description

Resveratrol-3-O-sulfate is a metabolite of resveratrol (Item Nos. 70675 | 10004235).¹ In U-937 cells stimulated with LPS, resveratrol-3-O-sulfate (1 μM) decreases the expression of IL-1α, IL-1β, and IL-6 by 61.2, 76.6, and 42.2%, respectively, and decreases the release of TNF-α and IL-6 to similar levels as resveratrol. It has antioxidant activity in a Trolox assay, dose-dependently decreases growth of Caco-2 colorectal adenocarcinoma cells when used at concentrations ranging from 10 to 100 μM, and induces apoptosis at concentrations of 25 and 50 μM.² Resveratrol-3-O-sulfate also displaces rosiglitazone (Item No. 71740) from the outer mitochondrial protein mitoNEET (IC₅₀ = 3.36 μM for the human protein), indicating that it binds to the thiazolidine-2,4-dione (TZD) binding pocket.³

References

1. Walker, J., Schueller, K., Schaefer, L.-M., *et al.* Resveratrol and its metabolites inhibit pro-inflammatory effects of lipopolysaccharides in U-937 macrophages in plasma-representative concentrations. *Food Funct.* **5**(1), 74-84 (2014).
2. Storniolo, C.E. and Moreno, J.J. Resveratrol metabolites have an antiproliferative effect on intestinal epithelial cancer cells. *Food Chem.* **134**(3), 1385-1391 (2012).
3. Geldenhuys, W.J., Funk, M.O., Awale, P.S., *et al.* A novel binding assay identifies high affinity ligands to the rosiglitazone binding site of mitoNEET. *Bioorg. Med. Chem. Lett.* **21**(18), 5498-5501 (2011).

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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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