

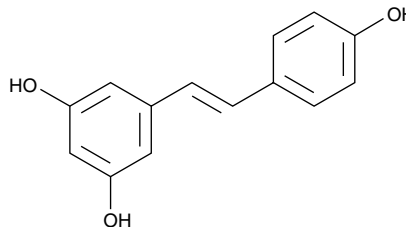
Product Information



trans-Resveratrol

Item No. 70675

CAS Registry No.: 501-36-0
Formal Name: 5-[(1E)-2-(4-hydroxyphenyl)ethenyl]-1,3-benzenediol
Synonym: (E)-Resveratrol
MF: C₁₄H₁₂O₃
FW: 228.2
Purity: ≥98%
Stability: ≥1 year at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ_{max}: 218, 307, 321 nm



Laboratory Procedures

For long term storage, we suggest that *trans*-Resveratrol be stored as supplied at -20°C. It should be stable for at least one year.

trans-Resveratrol is supplied as a crystalline solid. A stock solution may be made by dissolving the Resveratrol in an organic solvent purged with an inert gas. *trans*-Resveratrol is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of *trans*-Resveratrol in these solvents is approximately 65 mg/ml.

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 *trans*-Resveratrol can be prepared by directly dissolving the crystalline compound in aqueous buffers. The solubility of *trans*-Resveratrol in PBS (pH 7.2) is approximately 100 µg/ml. We do not recommend storing the aqueous solution for more than one day.

Phenolic compounds, particularly flavonoids, from plant sources have long been observed to have antioxidant activity with potential benefits for human health.¹⁻³ *trans*-Resveratrol is a potent phenolic antioxidant found in grapes and red wine that also has antiproliferative and anti-inflammatory activity.⁴ *trans*-Resveratrol is also a selective inhibitor of cyclooxygenase-1 (COX-1).⁵ It inhibits COX and peroxidase activities of COX-1 with ED₅₀ values of 15 and 3.7 µM, respectively; with essentially no inhibition of the COX activity of COX-2. Resveratrol also activates sirtuins⁶ and, in *C. elegans*, extends lifespan.⁷

References

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6. Borra, M.T., Smith, B.C., and Denu, J.M. *J. Biol. Chem.* **280**(17), 17187-17195 (2005).
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Related Products

COX-PAK - Item No. 10186 • Trismethoxy Resveratrol - Item No. 10188 • Trismethoxy Resveratrol-d₄ - Item No. 13129 • *trans*-Resveratrol-d₄ - Item No. 13130 • Astaxanthin - Item No. 70685 • Carnosol - Item No. 89800 • Luteolin - Item No. 10004161 • 3,4',5'-Trismethoxybenzophenone - Item No. 10004185 • *cis*-Resveratrol - Item No. 10004235 • PDM 11 - Item No. 10006341 • PDM 2 - Item No. 10006342 • CAY10465 - Item No. 10006546 • Combrestatin A4 - Item No. 10007412 • CAY10503 - Item No. 10008872 • CAY10512 - Item No. 10009536 • CAY10591 - Item No. 10009797 • SIRT1 Direct Fluorescent Screening Assay Kit - Item No. 10010401 • SIRT1 FRET-Based Screening Assay Kit - Item No. 10010991 • SIRT3 Direct Fluorescent Screening Assay Kit - Item No. 10011566 • SIRT1 (human recombinant) - Item No. 10011190 • SIRT3 (human recombinant) - Item No. 10011194

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent *via* email to your institution.

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