

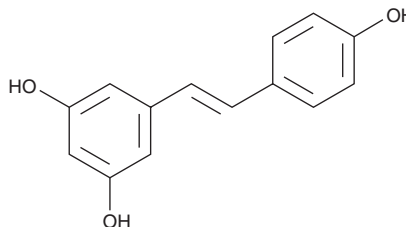
PRODUCT INFORMATION



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.

Description

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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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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