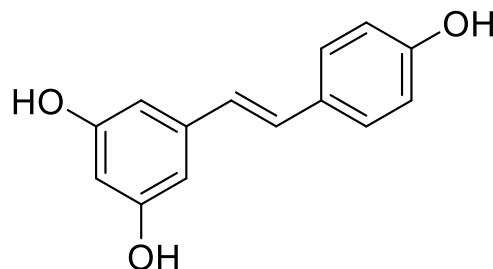


Resveratrol

Catalog number: B-0021



Molecular Formula: $C_{14}H_{12}O_3$

MW: 228.24

CAS: 501-36-0

Solubility: Ethanol, DMSO, DMF – at least 50 mg/mL, PBS (pH 7.2) ~100 µg/mL

Storage and Handling: Store dry at -20°C . Stock solutions can be prepared in organic solvent and flushed with inert gas. Aqueous solutions should not be store longer than 1 day

Background: Resveratrol is a class IA PI3K inhibitor, activates SIRT1, and displays antiproliferative effects on human breast epithelial cells. By depolarization of mitochondrial membrane and caspase-9 activation resveratrol induces apoptosis. In addition, Resveratrol inhibits: ribonucleotide reductase and DNA synthesis, cyclooxygenase-1, PKD, eicosanoid synthesis.

- References: 1) S Fröjdö, *et al.* Resveratrol is a class IA phosphoinositide 3-kinase inhibitor *Biochem J.* 406 511 (2007)
2) K.T. Howitz *et al.* Small molecule activators of sirtuins extend *Saccharomyces cerevisiae* lifespan. *Nature* 425 191 (2003)
3) O.P. Mgbonyebi *et al.* Antiproliferative effect of synthetic resveratrol on human breast epithelial cells. *Int. J. Oncol.* 12 865 (1998)
3) J. Dorrie *et al.* Resveratrol induces extensive apoptosis by depolarizing mitochondrial membranes and activating caspase-9 in acute lymphoblastic leukemia cells. *Cancer Res.* 61 4731 (2001)
4) M. Fontecave *et al.* Resveratrol, a remarkable inhibitor of ribonucleotide reductase. *FEBS Lett.* 421 277 (1998)
5) M. Jang, *et al.* Cancer chemopreventive activity of resveratrol, a natural product derived from grapes. *Science* 275 218-220 (1997)
6) J.R. Stewart *et al.* Effects of resveratrol on the autophosphorylation of phorbol ester-responsive protein kinases: inhibition of protein kinase D but not protein kinase C isozyme autophosphorylation. *Biochem. Pharmacol.* 60 1355 (2000)

Hazardous Properties and Cautions: The toxicological and pharmacological properties of this compound are not fully known. For further information see the MSDS on request. This product is manufactured and shipped only in small quantities, intended for research and development in a laboratory utilizing prudent procedures for handling chemicals of unknown toxicity, under the supervision of persons technically qualified to evaluate potential risks and authorized to enforce appropriate health and safety measures. As with all research chemicals, precautions should be taken to avoid unnecessary exposures or risks.

Warranty and Disclaimer: Echelon warrants the product conforms to the specifications stated herein. In the event of nonconformity, Echelon will replace products or refund purchase price, at its sole option, and Echelon shall not be responsible for any other loss or damage, whether known or foreseeable to Echelon. No other warranties apply, express or implied, including but not limited to warranty of fitness for any purpose or implied warranty of merchantability. Purchaser is solely responsible for all consequences of its use of the product and Echelon assumes no responsibility therefore, including success of purchaser's research and development, or health or safety of any uses of the product.

