



CERTIFICATE OF ANALYSIS

PRODUCT:	Resveratrol [<i>trans</i> -3,4',5-Trihydroxystilbene] C ₁₄ H ₁₂ O ₃ , M.W. 228.2, CAS# [501-36-0], M.I. 14: 8158
PRODUCT NUMBER:	R-1014
LOT NUMBER:	E1010A
APPEARANCE:	White to off-white solid
MELTING POINT:	253-255°C
PURITY (TLC):	≥ 98%
NMR:	Conforms
SOLUBILITY:	Soluble in DMSO (25mg/ml), 100% ethanol (20mg/ml)
APPLICATION NOTES:	Phenolic antioxidant found in grapes and wine. Potent activator of human deacetylase SIRT1 (maximum effect at 100-200µM). Increases longevity in yeast. Displays antiproliferative effect on human breast epithelial cells. Displays a variety of pharmacological activities including: estrogen receptor agonist activity, inhibition of ribonucleotide reductase and DNA synthesis, inhibition of eicosanoid synthesis, cell cycle arrest at S/G2 phase and induction of apoptosis. Inhibits PKD in vitro (IC ₅₀ = 200µM) and in vivo (IC ₅₀ = 800µM), but not PKC isoforms. Protects against 4-hydroxynonenal (4-HNE) induced oxidative stress and apoptosis. Shows cancer chemopreventive activity. Specific inhibitor of cyclooxygenase-1 (COX-1). Inhibits the hydroperoxidase activity of COX-1.
STORAGE & HANDLING:	Keep cool and dry at -20°C. Store solutions at -20°C < 1 month. <u>WARNING: IRRITANT!</u> CAUTION: For laboratory research & scientific manufacturing use only. Not for human or drug use. The pharmacological and toxicological properties of this product have not been fully investigated. Use caution when handling. Do not use this compound if you are not fully trained or are unaware of the hazards involved.

Verified: KS