

Resveratrol

Phytoalexins are organic metabolites produced by plants in response to fungal infections, heavy metals, or UV radiation¹. **Resveratrol (R1776)** is a stilbene-type phytoalexin found in the skin and seeds of grapes as well as many other plants such as peanuts, soybeans, and mulberries. Like other phytoalexins, resveratrol exhibits a variety of biological activities, including antioxidative, anticancer, neuroprotective, and cardioprotective effects.

A major dietary source of resveratrol is red wine. Many of the health benefits of red wine consumption have been attributed to the polyphenol fraction, which contains resveratrol. Resveratrol's activation of Sirtuin-1 has been linked to its potential anti-aging and metabolic properties².

Resveratrol is a strong antioxidant, inhibiting low-density lipoprotein oxidation and ameliorating oxidative stress in vitro³⁻⁴. Additional activities of resveratrol include lowering hepatic fat content,

reducing cholesterol levels, and inhibiting platelet aggregation⁵. Resveratrol also displays a broad range of chemopreventive and chemotherapeutic activities. This compound exhibits anticancer effects in several cellular and animal models⁶. In lung cancer cells, resveratrol induces caspase-mediated apoptosis; in a similar study in animal models, it inhibits growth of lung cancer tumor xenografts⁷. Resveratrol also inhibits the activities of COX and hydroperoxidase, two enzymes implicated in cancer progression.

LKT Laboratories carries several derivatives of resveratrol that exhibit similar activities. **Trans-3,4,5-Trimethoxy-stilbene (T7134)** is the permethylated derivative of resveratrol; it is more effective than resveratrol in inhibition of cell and tumor growth in models of colorectal carcinoma and prostate cancer⁸. **Triacetyl Resveratrol (T7132)**, a resveratrol prodrug, exhibits improved bioavailability over resveratrol. Like its parent compound, triacetyl resveratrol also exhibits potential anticancer activity⁹.

Related Products:

R1776 Resveratrol

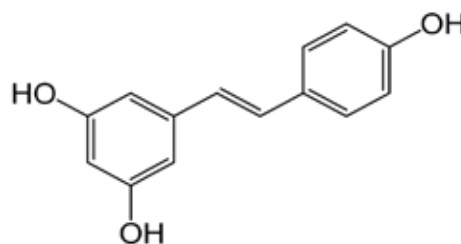
P3209 Piceatannol

T7132 Triacetyl Resveratrol

T7134 Trans-3,4,5-Trimethoxy-stilbene

D3331 α,β -Dihydroresveratrol

P7718 Pterostilbene



R1776 Resveratrol

References:

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