GRAPe VINE RESVERATROL®
Health and Beauty Benefits
VINEATROL® the only extract which contains
the Red Wine Resveratrol Derivatives

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Wine and Health

Biological Activities of Grape Vine Resveratrol

Antioxidant Activity

The Antioxidant Activity is quantified by electron paramagnetic resonance.

In this test, VINEATROL® is more efficient than trans-resveratrol and syringaresinol and 20 times more active than Viniferin®.

Anti-inflammatory activity

Epidermal inflammation process: increasing inflammatory properties by inducing ROS, pro-inflammatory cytokines, and IL-1β.

In this study, we compare the inhibitory effect on the cyclo-1-1 AMP phosphodiesterase activity of the grape Vine Resveratrol to that of Caffeine.

In this test, VINEATROL® proved to be 4 times more active than Caffeine in inhibiting PDE activity.

SIRT-1 Activation

Effect of grape Vine Resveratrol on the SIRT-1 gene expression. 

VINEATROL® increases SIRT-1 expression in human keratinocytes with a dose-dependent effect.

SIRT-1 Activity

SIRT-1 activity in the presence of Grape Vine Resveratrol is measured with a biochemical model of the SIRT-1 enzyme and a fluorescent substrate.

The SIRT-1 enzymatic activity is increased by 36% using 8 mg/kg VINEATROL® solution.

In vitro study

- VINEATROL® reduces the size of human prostate tumours implanted in mice with a dose-dependent effect.

References

In partnership with BIRIO GmbH, ACTICHEM participates in the research program "The Usage of resveratrol oligomers in functional food and nutraceuticals with a focus on cancer prevention" funded by the German Federal Ministry of Education and Research (IRTIF Project), in collaboration with three scientific partners: Prof. Dr. Dr. Helmut Kulling, MBB, Federal Research Institute for Nutrition and Food, Karlsruhe
Prof. Dr. Peter Wittwerth, Institute of Food Chemistry, University of Giessen
Prof. Dr. Peter Wittwerth, University of Veterinary Medicine Hanover

ACTICHEM is looking for new partnerships to test the biological activities of Grape Vine Resveratrol Derivatives.

The French Paradox refers to the statement that people in France suffer from relatively low incidence of coronary heart disease despite their diet being rich in saturated fat. Several epidemiological studies have shown the correlation between this paradox and a regular red wine consumption. The Resveratrol Derivatives have been identified as the major agents in helping to maintain a good cardiovascular health and to reduce the risk of neuro-degenerative disorders.

Red Wine Resveratrol Derivatives

Resveratrol is present in red wine in different forms: trans- and cis-forms, glycoside forms, oligomers and glucoside oligomers. The following resveratrol derivatives have been identified in red wine: [2, 3, 4, 5] and syringaresinol and pyroresveratrol.

Resveratrol Derivatives Biological Activities

The biological activities of the resveratrol derivatives are less studied than those of trans-resveratrol because the standards are not available, a few studies prove that these derivatives have biological activities similar to that of trans-resveratrol.

Origin of resveratrol derivatives in red wine

Resveratrol derivatives are constitutive flavonoids of the epicutaneous parts of the plant. They are present in the grapes skin as included substances. The resveratrol derivatives concentration in the grape skin is 1000 times less than those in the wood parts.

The origin of resveratrol derivatives in wine is most likely due to the extraction from grape skin occurring during alcoholic fermentation. The grape skins are also a potential source of resveratrol derivatives in red wine [22]. The amount of skin in the fermentation process depends on the way of wine-making practices: for example manual or mechanical harvesting, destemming or not.

Withering of the red grapes results in the formation of FLV (flavonol glycosides), which contain resveratrol oligomers stabile towards hot aqueous and nonaqueous solvents for several hours after 72 hours of treatment.

Some wrong statements about Resveratrol from grape vine

It is possible to produce resveratrol from red grapes. However, the amount of resveratrol never reaches 10 000 to 60 000 mg/l of wine.

It is possible to produce resveratrol from red wine.

GRAPe VINE RESVERATROL® is a wine skin extract. Because wine skin is the richest part of the plant in terms of resveratrol derivatives content, Grape Vine Resveratrol is made up of trans, resveratrol monomers, dimers, trimers and tetramers, as well as other resveratrol oligomers found in red wine.

Nine resveratrol monomers and oligomers have been identified in the Grape Vine Resveratrol: - 2 monomers: resveratrol and piceatannol - 3 dimers: Ampelosin A, Ampelosin B, lispaposide B - 3 trimers: Ampelosin A, Sheep's-Parthenol, lispaposide A

These molecules represent around 40% of the total weight of the extract. At these molecular weights have been isolated, characterized by mass spectrometry and NMR analysis. They are now quantitatively established by HPLC analysis.

A research program on GRAPe VINE RESVERATROL® is being carried out in order to identify other resveratrol oligomers in the extract.

The commercial product for nutraceutical VINEATROL® are: - trans-resveratrol 99% (order on request)

Effect of grape skin on trans-resveratrol: - total resveratrol monomers and oligomers: 25% to 30%

VINEATROL® is a water dispersible form of VINEATROL® for beverages.

In this text, VINEATROL® inhibits 5-α-reductase by 84%.

Anti-Aging / Anti Wrinkle activity

Prostate Health

VINEATROL® is more efficient than resveratrol and piceatannol. It inhibits prostate tissue by 68% after 22 hours of treatment

SIRT-1 Activation

In this study, we compare the inhibitory effect on the cyclic 3':5' AMP phosphodiesterase activity of the grape Vine Resveratrol to that of Caffeine.

In this test, VINEATROL® proved to be 4 times more active than Caffeine in inhibiting PDE activity.

Skin Lightening Activity

VINEATROL® is a solution of grape root extract containing 5% vinyl Resveratrol (Viniferin®)

At low concentrations, VINIFERIN® is more potent than lactic acid.

Trans-resveratrol is more potent than lactic acid.

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