



Resveratrol

A high purity,
nature-identical form
of trans-Resveratrol



Introduction

ChromaDex promotes health and well-being through the discovery and development of nutraceutical ingredients - naturally occurring molecules that can be integrated into dietary supplements, nutritional products and functional foods.

Like its cousin Pterostilbene, Resveratrol is a phytoalexin that is naturally produced by grapes, blueberries and Japanese knotweed (*Polygonum cuspidatum*) when under attack by pathogens such as bacteria or fungi. Resveratrol has received significant research interest for various health benefits. With all of the attention, consumer products advertising the health benefits of resveratrol have flooded the market. These products contain resveratrol in a variety of forms ranging from crude extracts to the purified compound.

Uses and Benefits of Resveratrol

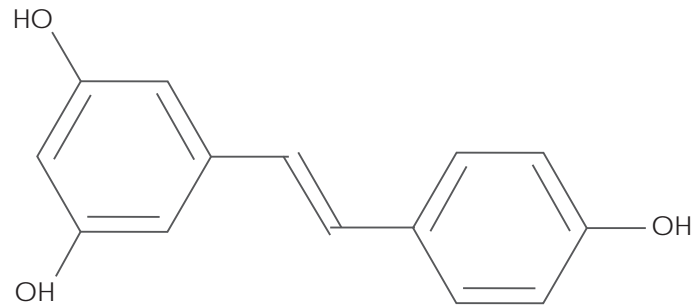
Potential Health Benefits:

- Anti-aging by inhibiting gene expression profiles associated with age-related illnesses
- Anti-inflammatory by reducing both acute and chronic chemically induced edema
- May prevent carcinogenesis by inhibiting cyclooxygenase (COX) and angiogenesis
- May limit the effects of a stroke by protecting against brain damage following cerebral ischemia
- Antioxidant - Resveratrol is a potent antioxidant
- Mimics calorie restriction
- Heart health - Resveratrol improves heart health
- Neuro-degeneration - Helps limit the oxidative damage known to cause neuro-degeneration and cognitive decline



Phytochemical Profile of Resveratrol

CAS#:	501-36-0
Molecular Weight:	228.25
Molecular Formula:	C ₁₄ H ₁₂ O ₃
Other Names:	1-(3,5-Dihydroxyphenyl)-2-(4-hydroxyphenyl) ethylene 3,4',5-Stilbenetriol; 5-[2-(4-Hydroxyphenyl) ethenyl]-1,3-benzenediol 3,4',5-Trihydroxystilbene trans-Resveratrol



Difference Between High Purity Resveratrol and an Extract

High Purity:

- Quality and composition can be assured
- Well-defined formula ingredient that is the basis for the majority of the scientific research investigating the health benefits

Extract:

- Quality and composition vary
- Health benefits are difficult to interpret
- May contain toxic anthraquinones that cause digestive disease

Many consumer products contain grape skin or Japanese knotweed extracts that are standardized to 50% resveratrol. Extracts, even if standardized, remain as crude ingredients. The quality and composition vary. Because of that variation and inconsistency in composition, studies of crude extracts are difficult to interpret for health benefits. Highly purified resveratrol, by contrast, is well-defined and is the basis for the majority of the scientific research investigating the health benefits. For that reason, pTeroPure supplies resveratrol at greater than 97% purity so the quality and composition are assured.

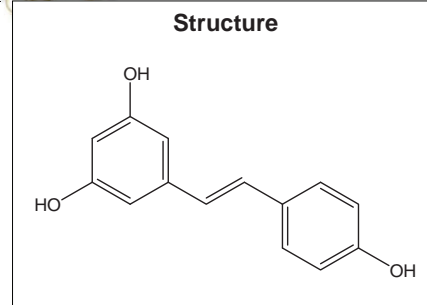
Sample Resveratrol Certificate of Analysis

ChromaDex™

setting THE standard

Certificate of Analysis

PRODUCT	Resveratrol
PART NUMBER	00018089
STANDARD TYPE	Food Grade (FG)
DATE OF SAMPLE	02/05/20XX
DATE OF REPORT	02/17/20XX



NAME	Resveratrol
OTHER NAME	1-(3,5-Dihydroxyphenyl)-2-(4-hydroxyphenyl)ethylene; 3,4',5-Stilbenetriol; 5-[2-(4-Hydroxyphenyl)ethenyl]-1,3-benzenediol; 3,4',5-Trihydroxystilbene; trans-Resveratrol
CHEMICAL FORMULA	C ₁₄ H ₁₂ O ₃
MOLECULAR WEIGHT (MW)	228.25
PUBLISHED MELTING POINT	265-267 °C
CAS NUMBER	[501-36-0]
CHEMICAL FAMILY	Phenolic acids

MANUFACTURER ASSAY

TEST	METHOD	SPECIFICATION	RESULT
HPLC	CDXA-CPM-056-00	NA	98.8%
Loss on Drying	NA	NMT 3.0%	1.4%
Heavy Metals	ICP	NMT 10 ppm	Conforms
Lead	ICP	NMT 1ppm	Below LOQ (<1.0ppm)
Arsenic	ICP	NMT 1ppm	Below LOQ (<1.0ppm)
Cadmium	ICP	NMT 1ppm	Below LOQ (<1.0ppm)
Mercury	ICP	NMT 1ppm	Below LOQ (<1.0ppm)
Total Plate Count	MICRO	NMT 1000 CFU/g	<10 CFU/g
Yeast and Mold	MICRO	NMT 100 CFU/g	<10 CFU/g
Salmonella	MICRO	NEGATIVE	NEGATIVE
E. Coli	MICRO	NEGATIVE	NEGATIVE
Staphylococcus	MICRO	NEGATIVE	NEGATIVE
Pseudomonas aeruginosa	MICRO	NEGATIVE	NEGATIVE
Appearance	N/A	Off-white to Light brown	Light brown solid

STORAGE CONDITIONS

STORAGE	Room Temperature in a dry place.
EXPIRATION DATE	02/20XX under the above conditions.

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Anti-Aging

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