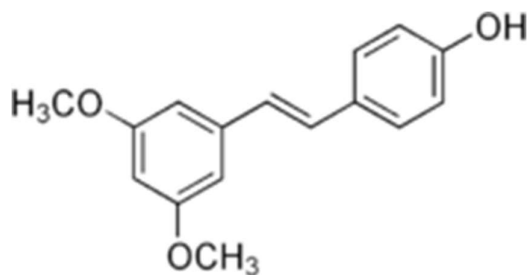


Pterostilbene



Pterostilbene is a methylated stilbene molecule and has structural similarity with resveratrol (two hydroxyl groups of resveratrol are replaced with methoxy groups). In other words, pterostilbene is a dimethylated derivative of resveratrol and reported more potent in some biological activates. It is also found to be better absorbed and generally known as a 'better resveratrol'. Pterostilbene has been noted to reduce anxiety, blood glucose, blood pressure (diastolic and systolic) in hypercholesterolemic adults, inflammation and serum triglycerides. Its effect on longevity and life extension, memory and learning, different solid tumors and antioxidant activity is well learnt.

Laurus Labs Limited has opted chemical route of manufacturing which also gives highest purity >99% and is equivalent to API quality. This controlled process avoids batch to batch variation therefore suitable for standardized formulations.

Molecular Formula: C₂₄H₂₆N₄O₅

Molecular Weight: 450.49

Applications:

- Nutraceutical/ Dietary supplement

Specifications

Description.....Off white to light brown color solid
 Identification (IR)..... Complies
 Identification (HPLC)..... Complies
 Loss on drying (%w/w, at 60°C under vacuum for 3 hrs)..... NMT 1.0
 Residue on ignition (%w/w).....NMT 0.1
 SolubilitySoluble in ethyl acetate, methanol and insoluble in water
 Melting Range (°C).....Between 90-96

Elemental Impurities by ICP-MS (PPM)

Lead..... NMT 1.0
 Arsenic..... NMT 1.0
 Cadmium..... NMT 1.0
 Mercury..... NMT 1.0

Related Substance by HPLC (%Area)

Pterostilbene..... NLT 99
 Cis Pterostilbene..... NMT 0.15
 ADPEP-1..... NMT 0.15
 Methyl impurity..... NMT 0.15
 Dimer impurity..... NMT 0.5
 Any unknown major impurity..... NMT 0.3
 Total impurities..... NMT 1.0

Microbial Tests

Total Aerobic Microbial Count.....NMT 1000Cfu/g
 Yeast and Mould.....NMT 100 Cfu/g
Salmonella.....Should be absent
Staphylococcus..... Should be absent
Escherichia coli..... Should be absent
Pseudomonas aeruginosa..... Should be absent

Changes in specifications can be discussed.

NMT: Not more than

NLT: Not less than

Salient Features

- Pure product (>99%), Nature identical
- Resveratrol analog but considered more bioavailable
- Unique combination with patented process (Patent No.: US8524782B2)
- Manufactured to FDA standards with consistent quality at a GMP certified facility
- Better pharmacokinetic activity (Cmax and AUC) than Pterostilbene from Pterocarpus extract
- Free from pesticides and no significant heavy metals
- Non-Irradiated, Non-EtO Ingredient

Pterostilbene Functions*

- Heart Health
 - maintain healthy systolic and diastolic blood pressure level already with in normal range
- Cognitive Function
 - improve memory & mental focus and reducing stress, anxiety & nervous tension
- Blood Sugar/Weight Management
 - support healthy blood sugar levels by raising the body's production of insulin
- Anti-aging antioxidant
 - fight free radicals caused by oxidative stress
- Sports nutrition
 - support vasodilation and healthy recovery

* These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

Pterostilbene is an effective ingredient supplements meant for

- Anti--aging
- Anti--oxidant/Oxidative Stress
- Memory improvement/Cognitive enhancement
- Sports nutrition
- Heart health
- Blood sugar control

New applications

- Cosmetics (prevention of UV-mediated damage)
- Ingredient blend for the food and beverage

Publication

- Jain R. Comparative pharmacokinetics of synthetic and natural pterostilbene. Hamdan Med J 2019;12:242-3