

Specification : Grape Extract / สารสกัดผลองุ่น (Manose RM-0067)

(Application : An active ingredient for prevention and treatment of aging, cancer and diabetes)

สารสำคัญในผลิตภัณฑ์เสริมอาหารสำหรับป้องกันและรักษาความชรา มะเร็งและเบาหวาน)

1. Name of the raw material : Grape Extract
2. Active components : Phenolic compounds, flavonoids and stilbenes⁽¹⁾
3. Common and scientific name/ Family of the plant : *Vitis vinifera* L./ VITACEAE
4. Physical appearance : Brown reddish solid with specific herbal odor
5. pH : 5
6. Standardization : HPLC fingerprint using resveratrol as a marker⁽²⁾
7. Solubility : Soluble in water and ethanol
8. Microbial contamination : No pathogenic microorganism with less than 1,000 cfu/g of the total plate count of bacteria, yeast and fungi which is conformed to the Thai FDA regulation
9. Biological activities : Anti-oxidative⁽³⁾, anti-bacterial⁽⁴⁾, anti-cancer⁽⁵⁾, anti-inflammatory⁽⁶⁾ and anti-diabetic activities⁽⁷⁾
10. Animal / human performance test : Anti-oxidative, anti-cancer and anti-diabetic effects in animals^(3, 5, 7)
11. Safety : No skin irritation in human volunteers/ LD₅₀ >5 g/kg BW in rats
12. Pharmaceutical, food supplement or cosmetic : Food supplements for prevention and treatment of aging, cancer and diabetes

applications

13. Recommended concentrations in the product : 0.1 – 5 %
14. Storage : Keep in tight and light protection container at room temperature
15. Precautions : -
16. Cost per kg : Please request

References

1. Asl MN, Hosseinzadeh H. Reviews of the pharmacological effects of *Vitis vinifera* (grape) and its bioactive constituent: An update. *Phytotherapy Research* 2016, 30: 1392-1403.
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4. Brown JC, Huang G, Haley-Zitlin V, et al. Antibacterial effects of grape extracts on *Helicobacter pylori*. *Applied and Environmental Microbiology* 2009, 75: 848–852.
5. Colin DJ, Limagne E, Ragot K, et al. The role of reactive oxygen species and subsequent DNA-damage response in the emergence of resistance towards resveratrol in colon cancer models. *Cell Death & Disease* 2014, 5e1533.
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7. Jin HY, Cha YS, Baek HS, et al. Neuroprotective effects of *Vitis vinifera* extract on prediabetic mice induced by a highfat diet. *The Korean Journal of Internal Medicine* 2013, 28: 579–586.