

Specification : Purple Glutinous Rice Cream for Anti-wrinkle  
and Skin Lightening (Manose PR-0029)

(Application : For anti-wrinkle and skin lightening)

1. Name : Purple Glutinous Rice Cream
2. Active Compositions : Purple glutinous rice (*Oryza sativa* Linn.) extract entrapped in nanoparticles
3. FDA Registration No. : In the process of cosmetic product notification with Thai FDA
4. Characteristics
  - Physical appearance : Purple-red semi-solid
  - pH : 7.28
  - Odor : Light specific herbal odor
5. Standardization : HPLC fingerprint using anthocyanin (cyanidin-3-glucoside) as a marker
6. Biological activities :
  - *In vitro* tyrosinase inhibition activity with the IC<sub>50</sub> value of 128.07±20.34 mg/ml (IC<sub>50</sub> value of kojic acid = 0.006±0.00 mg/ml)
  - Melanin inhibition activity in melanoma (B16F10) of 33.48±8.59% which is 0.58 time of kojic acid (57.26±2.43%)
  - Tyrosinase inhibition activity in melanoma (B16F10) of 38.42±14.59% which is 0.62 time of kojic acid (62.40±9.57%)
  - Antioxidant activity by DPPH radical scavenging with the SC<sub>50</sub> value of 13.98±1.59 mg/ml which is 0.0014 time of vitamin C (SC<sub>50</sub> value of 0.02±0.00 mg/ml)
  - Collagenase inhibition activity with the IC<sub>50</sub> value of 2221.32±882.06 mg/ml (IC<sub>50</sub> value of vitamin C = 0.022±0.001 mg/ml)

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- Elastase inhibition activity with the IC<sub>50</sub> value of more than 1000 mg/ml (IC<sub>50</sub> value of epigallocatechin gallate; EGCG = 0.16±0.04 mg/ml)
  - Hyaluronidase inhibition activity with the IC<sub>50</sub> value of more than 1000 mg/ml (IC<sub>50</sub> value of disodium cromoglycate; DSCG = 0.15±0.06 mg/ml)
7. **Clinical Performance** : -
8. **Microbial Contamination** : No pathogenic microorganism contamination. The amounts of the aerobic bacteria, yeast and fungi are less than 1,000 cfu/g which is in the acceptable range of Thai FDA, Ministry of Public Health
9. **Safety Evaluation** : - No cytotoxicity on human skin fibroblasts at 1 mg/ml with the cell viability of 95.03±3.64%  
- No skin irritation in human volunteers by the 4h closed patch test
10. **Stability** : Physically stable by the heating-cooling process (45 and 4 °C) of 6 cycles
11. **Shelf life at 30 °C** : 2 – 5 years
12. **Indication and use** : Apply and rub gently daily on the face, neck and jawline after cleansing
13. **Packaging and Storage** : 50 grams in a bottle / keep in dry and cool place protected from light
14. **Precaution** : Rinse off and stop using when there is any undesirable effect
15. **Cost** : Please request

**Reference :**

Manose In-house Project “Development of anti-aging and whitening cream containing purple glutinous rice extract entrapped in nanoparticles” Manose Health and Beauty Research Center (www.manose.co ), unpublished, 2022.