

Specification : Black Ginger Rhizome Extract / สารสกัดหัวกระชายดำ
(Manose RM-0086)

(Application : An active ingredient for anti-inflammatory, anti-oxidant, anti-cancer, vascular relaxation and sexual enhancing/ muscle building in food supplements / สารสำคัญในผลิตภัณฑ์ผลิตภัณฑ์เสริมอาหารต้านการอักเสบ ต้านปฏิกิริยาออกซิเดชัน ต้านมะเร็ง ขยายหลอดเลือด และเพิ่มสมรรถภาพทางเพศ / เสริมสร้างกล้ามเนื้อ)

1. Name of the raw material : Black Ginger Rhizome Extract
2. Active components : 5,7-dimethoxyflavone และ 5,7,4'-trimethoxyflavone⁽¹⁾
3. Common and scientific name/ Family of the plant : Black Ginger (*Kaempferia parviflora* Wall ex. Baker)/ ZINGIBERACEAE
4. Physical appearance : Dark brownish solid with herbal odor (for solid crude extract) and light brown clear solution with herbal odor (for extract solution)
5. pH : 5
6. Standardization : HPLC fingerprint using 5,7-dimethoxyflavone as a marker
7. Stability of active constituent : 5,7-dimethoxyflavone was stable at room temperature and light protection condition
8. Solubility : Soluble in water and ethanol
9. 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
10. Biological activities : Anti-inflammatory⁽²⁾, anti-oxidant⁽²⁾, anti-cancer⁽²⁾, vascular relaxation⁽²⁾ and sexual enhancing activity⁽²⁾
11. Animal / human performance test : Sexual enhancing activity in in animals⁽³⁾

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| 12. Safety | : | No skin irritation in human volunteers / LD ₅₀ > 5 g/kg
BW in rats |
| 13. Pharmaceutical, food
supplement or cosmetic
applications | : | Anti-inflammatory, anti-oxidant, anti-cancer, vascular
relaxation and sexual enhancing/ muscle building in
food supplements |
| 14. Recommended
concentrations in the
product | : | 0.1-10% w/w for dietary supplement products (the
solid crude extract 0.1%, while 10% for the 1% crude
extract in propylene glycol) |
| 15. Storage | : | Keep in tight and light protection container at room
temperature |
| 16. Precautions | : | None |
| 17. Cost per kg | : | Please request |

References

1. Saokeaw S, Wilairat P, Raktanyakan P, Dilokthornsakul P, Dhippayom T, Kongkeaw C, Sruamsiri R, Chuthaputti A, Chaiyakunapruk N. (2017) Clinical effects of Krachaidum (*Kaempferia parviflora*): A systemic review. **Journal of Evidence-Based Complementary & Alternative Medicine.** 22(3): 413-428.
2. Chen D, Li H, Li W, Feng S and Deng D. (2018) *Kaempferia parviflora* and its methoxyflavones: Chemistry and biological activities. **Evidence-Based Complementary and Alternative Medicine.** Article ID 4057456.
3. Trisomboon H, Watanabe G, Wetchasit P, Taya K. (2007) Effect of daily treatment with the Thai herb, *Kaempferia parviflora*, in Hershberger assay using castrated immature rats. **Journal of Reproduction and Development.** 53(2): 351-356.