

Specification : Lypose-M Extract / สารสกัดตำรับยาสมุนไพรไลโปเซ-เอ็ม  
(Manose RM-0127)

(Application : An active ingredient for weight loss food supplements/  
สารสำคัญในผลิตภัณฑ์เสริมอาหารควบคุมน้ำหนัก)

1. Name of the raw material : Lypose-M Extract
2. Active components : Phenolic compounds, flavonoids, terpenes, glycosides, sterols and tannins<sup>(1)</sup>
3. Common and scientific name/ Family of the plant : Containing Guava (*Psidium guajava* L.)/ MYRTACEAE, Common Bean (*Phaseolus vulgaris* L.)/ LEGUMINOSAE-PAPILIONOIDEAE and Kha (*Alpinia galanga* (L.) Willd.)/ ZINGIBERACEAE
4. Physical appearance : Dark brown solid with herbal odor
5. pH : 5
6. Standardization : HPLC fingerprint using tannin as a marker
7. Stability of active constituent : Tannin is 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 : Lipase inhibitory<sup>(2)</sup>,  $\alpha$ -glucosidase inhibitory<sup>(2)</sup> and  $\alpha$ -amylase inhibitory<sup>(2)</sup> activity
  - Lipase inhibition activity with the IC<sub>50</sub> value of 0.40 mg/ml which was 2.15 folds of Orlistat (IC<sub>50</sub> = 0.86 mg/ml)
  - $\alpha$ -glucosidase inhibition activity with the IC<sub>50</sub> value of 0.056 mg/ml which was 6.43 folds of Acarbose (IC<sub>50</sub> = 0.36 mg/ml)

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- $\alpha$ -amylase inhibition activity with the IC<sub>50</sub> value of 1.83 mg/ml which was 0.03 fold of Acarbose (IC<sub>50</sub> = 0.05 mg/ml)
11. Animal / human performance test : Weight loss activity in human volunteers<sup>(2)</sup>
- Weight loss activity in human volunteers with the reduction of body weight of 2-5 kg and the reduction of waist and hip size of 5-12 cm within 2 months without any side effects such as flatulence
12. Safety : No skin irritation in human volunteers / LD<sub>50</sub> > 5 g/kg BW in rats
13. Pharmaceutical, food supplement or cosmetic applications : Weight loss in food supplements
14. Recommended concentrations in the product : 250 mg in capsule
15. Storage : Keep in tight and light protection container at room temperature
16. Precautions : None
17. Cost per kg : Please request

## References

1. Joshi DM, Pathak SS, Banmare S, Bhisare SS. (2023) Reviews of phytochemicals present in *Psidium guajava* plant and its mechanism of action on medicinal activities. **Cureus**. 15(10): e46364.
2. Manose In-house Project “Lypose-M”, Manose Health and Beauty Research Center ([www.manose.co](http://www.manose.co)), unpublished, 2018.