

Specification : The Thai Medicinal Plant Recipe Extract NE013/

สารสกัดตำรับยาสมุนไพรไทย NE013 (Manose RM-0112)

(Application : An active ingredient in food supplements for oral cancer/

สารสำคัญในผลิตภัณฑ์เสริมอาหารสำหรับมะเร็งช่องปาก)

1. Name of the raw material : The Thai Medicinal Plant Recipe Extract NE013
2. Active components : Flavonoids, phenolic compounds, tannins, steroids, triterpenoids and brazilin⁽¹⁾
3. Common and scientific name/ Family of the plant : Sappan (*Caesalpinia sappan* L.)/ LEGUMINOSAE-CAESALPINOIDEAE and Ka-fak (*Helixanthera parasitica* Lour.)/ LORANTHACEAE
4. Physical appearance : Reddish-brown solid with herbal odor
5. pH : 5
6. Standardization : HPLC fingerprint using brazilin as a marker
7. Stability of active constituent : Brazilin 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 : Anti-cancer activity⁽²⁾
 - Anti-proliferative activity on human mouth epidermal carcinoma (KB) with the IC₅₀ value of 6.50 µg/ml which was 0.51 fold of cisplatin (IC₅₀ = 3.32 µg/ml)
11. Animal / human performance test : None

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12. **Safety** : No skin irritation in human volunteers / LD₅₀ > 5 g/kg
BW in rats
13. **Pharmaceutical, food supplement or cosmetic applications** : Anti-cancer in food supplements for oral cancer
14. **Recommended concentrations in the product** : 0.1-1.0% w/w in food supplements
15. **Storage** : Keep in tight and light protection container at room temperature
16. **Precautions** : None
17. **Cost per kg** : Please request

References

1. Kitdamrongtham W, Manosroi A, Akazawa H, Gidado A, Steinrut P, Manosroi W, Lohcharoenkal W, Akihisa T, Manosroi J. (2013) Potent anti-cervical cancer activity: Synergistic effect of Thai medicinal plants in recipe N040 selected from the MANOSROI III database. **Journal of Ethnopharmacology**. 149: 288-296.
2. Manose In-house Project “The Development of Extracts from Thai Medicinal Plant Recipes for Anti-cancer”, **Manose Health and Beauty Research Center** (www.manose.co), unpublished, 2010.