



**UTM**  
UNIVERSITI TEKNOLOGI MALAYSIA

# SILDENAFIL KIT

MOBILE TEST KIT FOR  
DETECTION OF SILDENAFIL

(PI 2013 003635)



## DESCRIPTION

Sildenafil Kit is a Mobile Test Kit to detect sildenafil in food and beverages. This product can simplify the conventional process that only can be done in the laboratory. Usually in the laboratory using equipment such as infrared spectroscopy and liquid chromatography for detecting the existing of sildenafil.

### Needs

The technology comprises of two processing stages :

- Production of reagent for mobile testing of sildenafil.
- Packaging of reagent with other testing tools, sampling bottle, test bottle, instruction kit and disposal containers.

### Application

The developed mobile test kit is suitable for detection of sildenafil. It can be used as an alternative or substitute for analytical device that only available in the laboratory. The kit provides accurate result, practical usage and instant result. Besides that, it saves times and avoids result dispute per current lab based practice. Sildenafil mobile kit also can be used as one of the kits to detect the sildenafil in the food. Due to its mobility consumers could undertake own home testing.

### Benefits

- User friendly – The mobile kit is easy to use. User needs to mix the test sample with reagent and then the result can be evaluated based on the solution colour.
- The Fast-Analysis result can be obtained within few seconds. Unlike the practice now, lab testing took weeks to complete.
- Highly Accurate-The formation of ion-association complexes of sildenafil and BCG give an intense colour of yellow. The intense yellow color based on concentration of sildenafil formed ion-association complex with Bromocresol Green (BCG).

### Targeted Market

- Distributing Company.
- Original Equipment Manufacturer (OEM).
- National Pharmaceutical Control Bureau (NPCB), Ministry of Health.
- Department of Chemistry Malaysia, Ministry of Science, Technology and Innovation (MOSTI).

**PROJECT LEADER** : Prof. Dr. Abd. Rahim Yacob  
**EMAIL** : abd.rahim@utm.my

