

CoQ10 Bioavailability test method

1. Purpose;

To check bioavailability for 3 different formulations.

2. Test Product;

- 1) 250mg HardCapsule with 40SP
- 2) 100mg API + 150mg dextrin Hardcapsule
- 3) Softgel capsule produced by Seisen

3. Test method;

- 1) collect each 3 normal healthy people total 9 people and make a 3 groups.
- 2) People did not take dinner and any drink alcohol after 2100 last night and no breakfast on the trial day.
- 3) Take 5ml in vein at 8:00h during the test day.
- 4) Take 1 each specific formulation from 3 kinds of CoQ10 formulations.
- 5) Take each 5ml of blood at 2,4,6,8,24,48,72hours after intake

4. Preparation of blood plasma;

Using centrifugation to separate Plasma with 1500g x 10min and takes plasma and keep it at -80

5. Extraction CoQ10 from Plasma;

- 1) measure 1ml of plasma
- 2) Mixing both with hexane and ethanol anhydrate. And make centrifugation at 3000rpm x 10min.
- 3) Take 1ml from upper layer and add FeCl₃ liquid and make 5ml test sample

6. Analytical

Equipment; Alliance 2695 separation module Waters 2487 UV

Column; XTerra MS C18 5micron 4.6x 150mm Waters

Column temp; 35

Solvent; Methanol/Ethanol; 13/3

Retention speed; 1.0ml/min.
Injection amount; 10microliters
Detection; 275nm