KPG Ferric Reducing Ability of Plasma (FRAP) Assay Kit (For research use only)

Catalog Nos. KPG-FRAP Lot Nos. KPG-FRAP1

Component of KPG NO Assay Kit:

- Solution A (CN. KPG-Sa) , 1 Vial 3 mL
- Solution B (CN. KPG-Sb), 1 Vial 3 mL
- Solution C (CN. KPG-Sc), 1 Vial 3 mL
- Standard (CN. KPG-StdFRAP), 1 Vial 2 mL

Other materials needed: Samplers, Centrifuge, ELISA plate and ELISA reader covering 593 nm.

Preparation of the solution: Solution A, B and C needs to be mixed immediately before experiments in 10/1/1 ratio to make working solution. For example, if you need to test 4 samples prepare 300 µL working solution, so mix 250 µL solution A with 25 µL solution B and 25 µL solution C. The mix is stable for 30 minutes only and needs to be prepared immediately before experiments.

Preparation of standards

Add 100 mL deionized distilled water (DDW) to the standard bottle and mix well to make 10 mM solution. Add 2 mL from the standard with 10 mM Fe^{2+} to 8 mL DDW to make a 2 mM concentration and then make serial dilutions using the following table to make standard 1 to 6:

Std	Concentrations (Fe^{2+})	H_2O	volume
1	1 mM (1000 µM)	500 µL	500 µL
2	0.7 mM (700 µM)	650 µL	350 µL
3	0.5 mM (500 µM)	750 µL	250 µL
4	0.3 mM (300 µM)	850 µL	150 µL
5	0.2 mM (200 µM)	900 µL	100 µL
6	0.1 mM (100 µM)	950 µL	50 µL

Procedure:

1. Before starting the procedure keep the kit components in room temperature for 20 minutes.
2. Add 5 µL sample, standards and DDW (as blank) to the clean ELISA plates, then add 70 µL working solution and mixed for 30 seconds.
3. Incubate the plate at 37 ºC for 5 minutes and evaluate its OD at 593 nm.

Safety directions: The solutions are tissue hazard materials, hence, in the cases of contact with skin, eyes and ETC, wash with water and refer to hospital for additional medications.