

Antioxidant Capacity (FRAP) Assay Kit | FRAP assay kit

Total Antioxidant Capacity Assay Kit (FRAP)

CATALOG #
AAA249419

PRODUCT SYNONYMS

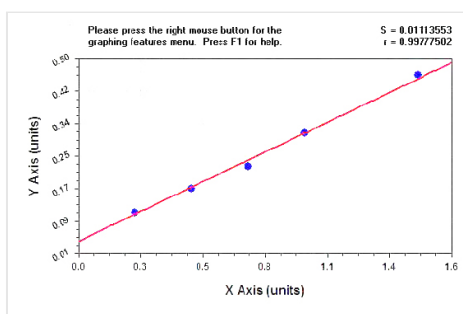
Antioxidant Capacity (FRAP); Total Antioxidant Capacity Assay Kit (FRAP); FRAP assay kit

PRODUCT SPECIFICATIONS

Preparation and Storage

The kit is shipped on ice pack and storage at -20 degree C is valid in ~12 months, protected from light, is recommended.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for FRAP assay kit

Background/Introduction: Oxidants, such as reactive oxygen species (ROS) and reactive nitrogen species (RNS), can generate free radicals that can cause severe oxidative damage to cellular lipids, membranes, proteins, and DNA. Antioxidants can scavenge these free radicals and prevent cellular oxidative stress by enzymatic and non-enzymatic mechanisms. Enzyme systems that function as antioxidants include catalase and peroxidase. Tocopherols, carotenes, vitamin A, and ubiquinol function as lipid-soluble antioxidants; whereas, glutathione and ascorbate are some of the water-soluble antioxidants. Measurement of the total non-enzymatic antioxidant capacity (TAC) of biological samples is indicative of their ability to counteract oxidative stress-induced damage in cells. TAC is used to provide insights into the development and treatment of oxidative-stress related disorders. In the Total Antioxidant Capacity Assay Kit, either the concentration of the combination of both small molecule and protein antioxidants, or the concentration of only small molecule antioxidants can be determined. Under acidic condition, Fe^{3+} -TPTZ is converted to Fe^{2+} -TPTZ by both small molecules and proteins. The reduced Fe^{2+} -ion chelates with a colorimetric probe, giving a broad absorbance peak at 593 nm, which is proportional to the total antioxidant capacity. Because of acidic conditions, and the total plasma concentration of iron ion and ferrous ion in serum samples is usually lower than 10 μM , some endogenous interference factors can be inhibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/assay-kits/antioxidant-capacity-frap/249419>