

Total Antioxidant Status Assay Kit

Product Information

Cat

kit-2174

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Product Overview

Antioxidants in the sample reduce dark blue-green colored ABTS radical to colorless reduced ABTS form. The change of absorbance at 660 nm is related with total antioxidant level of the sample. The assay is calibrated with a stable antioxidant standard solution which is traditionally named as Trolox Equivalent that is a vitamin E analog.

Storage

4°C

Kit Components

All reagents and standards are ready to use.

Reagent 1 (Assay Buffer) 1 x 50 ml

Reagent 2 (Colored ABTS Radical Solution) 1 x 10 ml

*Standard 1 (0.0 mmolTrolox Equiv./L) Solution(Not included)

Standard 2 (1.0 mmolTrolox Equiv./L) Solution1 x 10 ml

*You should use any deionised-water

Materials Required but Not Supplied

A spectrophotometer or a plate reader or an automated biochemistry analyzer.

Compatible Sample Types

Blood serum, plasma, semen plasma, saliva, urine, cell lysates, tissue homogenates, beverages, fruit juices and oils (oils require different reagent 1) can be used as sample.

Assay Protocol

1. Manual Study



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Place 500 microliter Reagent 1 in cell and add 30 microliter standard (or sample). Read the initial absorbance at 660 nm for the first absorbance point.

Add 75 microliter Reagent 2 to the cell and incubate 10 min at room temperature or 5 min at 37°C.

Read the absorbance a second time at 660 nm.

Calculating the Results

Result = [(ΔAbs Std1) - (ΔAbs Sample)]/[(ΔAbs Std1) - (ΔAbs Std2)]

Δ Absorbance Standard1 = (Second Absorbance of Std1 - First Absorbance of Std1)

Δ Absorbance Standard2 = (Second Absorbance of Std2 - First Absorbance of Std2)

Δ Sample Absorbance = (Second Absorbance of Sample - First Absorbance of Sample)

2. Automated measurement is performed as same procedure. Only incubation time is shortened from 10 min to 5 min. Other parameters are similar. The volumes of reagents and sample are reduced at same ratio.
