Anthocyanins Assay

(Cat. # BAQ049, BAQ050, BAQ051)

INTRODUCTION

Anthocyanins represent the most important group of water-soluble pigments in the visible region detectable by the human eye. These pigments are responsible for the different colors ranging from red to blue present in various fruits, vegetables and cereals, accumulated in cell vacuoles. Anthocyanins have different functions in the plant such as the attraction of pollinators for the subsequent dispersion of seeds and the protection of the plant against the effects of ultraviolet radiation and against viral and microbial contamination.

Interest in anthocyanin pigments and their aglycans, anthocyanidins, in scientific research have increased in recent years, due not only to the color they confer on products containing them but also to their likely role in the reduction of coronary diseases, cancer or diabetes and to its anti-inflammatory effects and upturn of visual acuity and cognitive behavior. Therefore, in addition to their functional role as colorants, anthocyanins are potential agents in the production of products with added value for human consumption.

Anthocyanins measure kit is an easy, fast and reliable method for detecting anthocyanins and anthocyanidins in solution,.

ITEM(S) SUPPLIED

Description	625 tests (BAQ049)	1,250 tests (BAQ050)	2,500 tests (BAQ051)
AC Reagent A	125ml	250ml	500ml
AC Reagent B	125ml	250ml	500ml

STORAGE CONDITIONS

This kit is shipped at ambient temperature. Store all the reagents as indicated on the labels. If stored and used as directed this kit is stable for 12 months.

ADDITIONAL ITEMS REQUIRED

- Spectrophotometer microplate reader that can measure 510 and 700 nm
- 96 well microtiter plate for microplate assay.
- 1.5ml Tubes

PROTOCOL

1. For a 96-well plate assay, add 200 µL of AC Reagent A to one well and 200 µL of AC Reagent B to a different well.
2. Add 20 µL of sample in each well.
   NOTE: *For a 1ml cuvette, use 910µl AC Reagent A and B with 90µl sample*
3. Shake microplate 1 min and then incubate at ambient temperature for 10 min.
4. Measure the absorbance at 510 nm (anthocyanin maximum absorption) and at 700 nm (for turbidity correction).

DATA ANALYSIS

Calculate absorbance due to anthocyanins with the following formula:

A' = (A510 nm Reagent A – A700 nm Reagent A) – (A510 nm Reagent B – A700 nm Reagent B)

Total anthocyanins in mg/L calculated as equivalent of cyanidin 6-O-glucoside is:

[anthocyanins] (mg/L)= [A' x (DF) x 449.2 x 1000]/26900

Where DF is the dilution factor used

RELATED PRODUCTS

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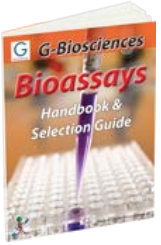

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