

Anthocyanins Assay Kit

KB-03-015

625 test (96 well plate)

BOCKit

A brand of  **BioQuoChem**

Index

Introduction	Pag. 1
Materials	Pag. 2
Assay Protocol	Pag. 3
Data Analysis	Pag. 4
Warranties and Limitation of Liability	Pag. 5



➤ All chemicals should be handled with care

➤ This kit is for R&D use only

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, like in wine or in berry extracts.

Materials

BQCKit Anthocyanins Assay kit *KB-03-015* 625 tests contains:

Product	Quantity	Storage
Reagent A	1 bottle of 125 mL	RT
Reagent B	1 bottle of 125 mL	RT

Assay Protocol

Performing the assay

1. Considering a 96 well plate^{**}:
 - Add 200 μL of Reagent A in one well
 - Add 200 μL of Reagent B in other well
2. Add 20 μL of sample in each well.
3. Shake microplate 1 min and wait 10 min.
4. Measure the absorbance at 510 nm (anthocyanin maximum absorption) and at 700 nm (for turbidity correction).

^{**} In 1 mL cuvette add 910 μL of Reagent A and 90 μL of sample. Same amounts with Reagent B.

Data Analysis

Calculate absorbance due to anthocyanins with the following formula:

$$A' = (A_{510 \text{ nm Reagent A}} - A_{700 \text{ nm Reagent A}}) - (A_{510 \text{ nm Reagent B}} - A_{700 \text{ nm Reagent B}})$$

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

$$[\text{anthocyanins}] \text{ (mg/L)} = \frac{[A' \times (\text{DF}) \times 449.2 \times 1000]}{26900}$$

Where DF is the dilution factor used

Warranties and Limitation of Liability

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Said refund or replacement is conditioned on buyer giving written notice to Bioquochem (BQCKit) within 30 days after arrival of the material at its destination.

Expiration date: 1 year from the date of delivery

For further details, please refer to our website www.bqckit.com.

