

Sucrose Colorimetric Assay Kit

Cat No: HR3BC1185

For research use only

Overview

Detection Method	Colorimetric method
Storage	2-8?
Instrument	Spectrophotometer(290 nm)
Assay Time	40 min
Validity	6
Assay Type	Quantitative
Sample Type	Plant tissue
Synonyms	
Instrument	Spectrophotometer(290 nm)
Detection Principle	Sucrose in plant tissue is hydrolyzed to glucose and fructose in boiling water bath under acidic conditions. 5-hydroxymethyl furfural was synthesized from fructose under acid condition and measure the ultraviolet absorption of 5-hydroxymethyl furfural. Glucose must be dissimilated into ketose structure and reduced to obtain 5-hydroxymethylfurfural, but the rate of isomerization of glucose to ketose is very slow. Therefore, the ultraviolet absorption of glucose is much smaller than fructose.
Reagents	PBS (0.01 M, pH 7.4)
Labware	Micropipettor, Vortex mixer, 100? Water bath
Size	100Assays
Sensitivity	0.32 ?mol/mL
Detection Range	0.32-70 ?mol/mL
Recovery Rate	102