

# D-Glucuronic acid and D-Galacturonic acid Assay Kit

## Product Information

### Cat.No.

Kit-2058

### Product Overview

Enzymatic method for the determination of D-glucuronic acid and D-galacturonic. Based on the spectrophotometric measurement of NADH produced through the reaction, after addition of uronate dehydrogenase (UDH).

### Size

100 tests

### Description

D-Glucuronic acid and D-galacturonic acid are naturally occurring hexuronic acids present in glycosaminoglycans, glucuronid conjugates in plant polysaccharides and in mammals. Both D-glucuronic acid and D-galacturonic acid are major components of plant cell wall polysaccharides, being D-glucuronic a component of arabinoxylan and Dgalacturonic the major component of pectin. In mammals, Dglucuronic acid occur as a component of glycosaminoglycans, such as hyaluronan, heparin and chondroitin present in cartilage.

### Applications

This rapid and simple method is used for the determination of D-glucuronic acid and D-galacturonic acid in a variety of matrices. This kit is adequate to D-hexuronic acids (including D-glucuronic acid and D-galacturonic acid) measurement in hydrolysates of plant material and polysaccharides, as well as other materials.

### Kit Components

Solution 1. Buffer (22 mL, pH 8.0) plus sodium azide (0.02% w/v) as a preservative. Stable for 2 years at 4 °C. Solution 2. NAD+ freeze dried powder. Stable for 5 years at -20 °C. Dissolve content in 22 mL of distilled water and divide into appropriately sized aliquots and store in PP tubes at -20 °C between use (stable for 2 years) and keep cool during use. Suspension 3. Uronate dehydrogenase (UDH) in 3.2 M ammonium sulphate (2.2 mL). Stable for 2 years at 4 °C. Swirl bottle before use.

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Solution 4. D-glucuronic standard solution (5 mL, 0.5 mg/mL). Stable for >2 years at 4 °C. This standard solution can be used when there is some doubt about the method accuracy.

**Detection method** UV method

### Compatible Sample Types

Hydrolysates of plant material and polysaccharides, cell culture medium and fermentation samples as well as other materials.

### Features & Benefits

Simple formatStable reagentsSuitable for manual and micro volume formats

### Sensitivity

Reaction volume: 2.52 mLRange: 5-1500 mg/LDetection limit: 17.4 mg/L