CREATIVE BIOMART®
Assay Kit

Glucogen Content Assay Kit

Product Information

Product Overview

Significance of Measurement: Glycogen is a high-molecular-weight polysaccharide composed of glucose units and represents one of the main storage forms of carbohydrates. It is primarily stored in the liver and skeletal muscle as a reserve energy source, referred to as hepatic glycogen and muscle glycogen, respectively. Hepatic glycogen plays a crucial role in maintaining blood glucose homeostasis by synthesizing glycogen when blood glucose levels are high and degrading it into glucose when blood glucose levels decline. Muscle glycogen serves as an energy source during intense exercise; however, it cannot directly contribute to blood glucose and must first be metabolized into lactate, which is transported to the liver for gluconeogenesis. Therefore, glycogen content is an important indicator of energy metabolism.
Principle of Measurement: Anthrone colorimetric method. Glycogen is extracted using a strong alkaline extraction solution and subsequently reacts with anthrone reagent under strongly acidic conditions to produce a colored product. Glycogen content is determined by measuring absorbance.

Size

100t/96s

Storage

Store at 2–8 °C. Shelf life: 1 year.

Detection method Spectrophotometer/Microplate Reader

Materials Required but Not Supplied

Visible spectrophotometer or microplate reader, water bath, adjustable pipettes, quartz cuvettes or 96-well plates, concentrated sulfuric acid (not included), and distilled water.

Tel: 1-631-559-9269 1-516-512-3133
Email:info@creative-biomart.org
Fax:1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA