

# Calcium Colorimetric Assay Kit

**Cat. No. GTX85578**

References ( 2 )

Package

250 assay

## PRODUCT

Calcium is essential for all living organisms, where Ca<sup>2+</sup> sequestration and release into and out of the cytoplasm functions as a signal for many cellular processes. 99% of calcium is found in bones and teeth with the remaining 1% found in the blood and soft tissue. Serum calcium levels are tightly controlled (8.4-11.4 mg/dL) and any variation outside this range can have serious effects. Calcium plays a role in mediating the constriction and relaxation of blood vessels, nerve impulse transmission, muscle contraction, and hormone secretion. Calcium ion channels control the migration of calcium ions across cell membranes, permitting the activation and inhibition of a wide variety of enzymes. Causes of low calcium levels include chronic kidney failure, vitamin D deficiency, and low blood magnesium levels that can occur in severe alcoholism. GeneTex's Colorimetric Calcium Assay Kit utilizes the chromogenic complex ( $\lambda = 575 \text{ nm}$ ) formed between calcium ions and 0-cresolphthalein to provide a simple assay in the physiologically important range of calcium concentration 0.4-100 mg/dL (0.1-25 mM).

## Summary

- Detection method- Colorimetric ( $\lambda_{\text{max}} = 575 \text{ nm}$ )
- Sample type- Cell and Tissue lysates, culture media, urine, plasma and serum, as well as many other biological fluids
- Species reactivity- Mammalian
- Kit size- 250 assays
- Applications- The kit can detect calcium concentration 0.4-100 mg/dL (0.1-25 mM).

### Features and Benefits

- Simple procedure; takes less than 20 minutes
- Fast and convenient
- The assay is sensitive, stable and high-throughput adaptable
- Calcium Assay Kit utilizes the chromogenic complex formed between calcium ions and 0-cresolphthalein to provide a simple assay

### Kit Contents:

Calcium Assay Buffer  
Chromogenic Reagent  
Calcium Standard (500 mM)

## Properties

### Storage

Store at +4°C. Product has an expected shelf life of 12 months.

### Note

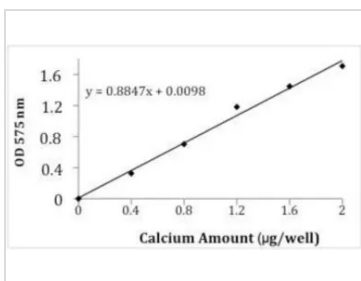
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**DATA IMAGES**

**GTX85578 Image**

**GTX85578 Image**

Quantification of Calcium concentration using colorimetric assay kit


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