



## Total Collagen Assay Kit (Colorimetric)

### Product Information

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**Cat**

Kit-1029

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**Common Name**

Collagen

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**Cat.No.**

Kit-1029

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**Description**

Collagen is the most abundant insoluble protein found in the extracellular matrix and connective tissues. It can be found in skin, tendons, bone, cartilage, muscle, vitreous humor and ligaments, among other tissues. There are more than sixteen - well characterized types of collagens, but types I, II and III collagen comprise more than 80% content in mammals. The triple-helical structure of collagen is quite unique: it consists of a repeating pattern of a basic trimer: Glycine-Proline-Hydroxyproline. In cells, collagens are secreted as procollagens and these chains are transported into the Endoplasmic Reticulum, where, numerous post-translational modifications lead to the formation of a triple helix with disulfide bonds. Excessive production of collagen is linked to pathological conditions including liver cirrhosis, lung fibrosis, and tumor growth. Collagen Assay Kit is a simple and sensitive assay to detect small amounts of collagens in a variety of samples. The assay is based on the acid hydrolysis of samples to form hydrolysates and Hydroxyproline. This released Hydroxyproline gets oxidized to form a reaction intermediate, which further in the reaction, forms a chromophore (Abs 560 nm). The assay is simple, sensitive and specific for collagen and can detect as low as 0.5  $\mu$ g of collagen in a variety of samples such as tissue homogenates, biological fluids and purified proteins.

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**Applications**

Measurement of collagen in various sample types.

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**Storage**

-20°C



## Total Collagen Assay Kit (Colorimetric)

### Shipping

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Gel Pack

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### Size

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100 assays

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### Kit Components

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Oxidation Buffer; Chloramine T Concentrate; Perchloric Acid/Isopropanol Solution; DMAB Concentrate (in DMSO); Collagen I Standard (2 mg/ml)

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### Target Species

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Mammalian tissues, protein/peptide hydrolysates, serum, urine

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**Detection method** Absorbance (OD = 560 nm).

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### Features & Benefits

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Simple, fast and convenient assay; Can detect as low as 0.5 µg of collagen in a variety of samples

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