

ABG9719033: GCL assay kit :: gamma-Glutamyl Cysteine Ligase (GCL) Assay Kit

Description

Principle of the Assay: In the presence of ATP and Mg^{2+} , GCL catalyzes the synthesis of gamma-glutamylcysteine from glutamic acid and cysteine; at the same time, ATP dephosphorylation produces inorganic phosphorus molecules. GCL activity can be calculated by measuring the increase rate of inorganic phosphorus.

Background/Introduction: gamma-Glutamyl Cysteine Ligase (GCL) is the rate-limiting enzyme for GSH synthesis, and GSH has a feedback inhibitory effect on GCL. GCL gene expression is regulated by many factors, such as oxidants, antioxidants, growth factors and inflammatory factors. The level of GCL activity has an important influence on the GSH content and the GSH/GSSG ratio.

Product Info

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| Amount : | 96 Tests |
| Storage condition : | Store at -20 degree C and protected from light upon receipt. Kit has a storage time of est. 6 months from receipt. Shipping: Gel pack with blue ice. |

Application Note

The kit provides a simple method for detecting GCL activity in a variety of biological samples such as tissues, cell, serum, bacterial. In the assay, In the presence of ATP and Mg^{2+} , GCL catalyzes the synthesis of gamma-glutamylcysteine from glutamic acid and cysteine; at the same time, ATP dephosphorylation produces inorganic phosphorus molecules. GCL activity can be calculated by measuring the increase rate of inorganic phosphorus.