



Acetaldehyde Colorimetric Assay Kit

Product Information

Cat

Kit-2428

Cat.No.

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Product Overview

ACETALDEHYDE (CH₃CHO) is one of the most widely occurring aldehydes in nature and is commonly used in industry. Acetaldehyde, a metabolic byproduct of ethanol in the liver, is toxic to the human body and is rapidly converted to the less harmful acetic acid by the enzyme aldehyde dehydrogenase. People with a deficiency of aldehyde dehydrogenase accumulate acetaldehyde when consuming alcohol and this accumulation results in facial and body flushing often referred to as "Asian flush syndrome." Build up of acetaldehyde has also been associated with the effects of hangovers from alcohol consumption. Although classified as a carcinogen, acetaldehyde is naturally found in many foods and beverages such as ripe fruit, coffee, and wine. colorimetric acetaldehyde assay kit is based on aldehyde dehydrogenase catalyzed oxidation of acetaldehyde, in which the formed NADH reduces a formazan reagent. The intensity of the product color, measured at 565 nm, is directly proportional to the acetaldehyde concentration in the sample.

Storage

-20°C

Shipping

On Ice

Size

100 tests

Detection method OD565nm

Compatible Sample Types



Acetaldehyde Colorimetric Assay Kit

Biological samples (e.g. plasma, serum, urine, tissue and culture media) and food/beverage samples (e.g. wine, coffee, and juice).

Features & Benefits

Fast and sensitive. Linear detection range (10 μ L sample): 4 μ M to 4 mM acetaldehyde in 96-well plate assay.

High-throughput. The procedure involves adding a single working reagent, and reading the absorbance after 30 minutes. Room temperature assay. No 37°C heater is needed.

Convenient. Homogeneous "mix-incubate-measure" type assay. Can be readily automated on HTS liquid handling systems for processing thousands of samples per day.

Assay time

30 min

Sensitivity

2 μ M
