

RELAASSAY CATALASE ASSAY KIT

Catalase

Catalase is a ubiquitous antioxidant enzyme which catalyses the decomposition of hydrogen peroxide (H_2O_2) to water and oxygen. Catalases are tetramers of four identical subunits (220 to 350 kD), each with a heme prosthetic group at the catalytic center. In humans, the highest levels of catalase are found in the liver, kidney, and erythrocytes.

Assay Principle

This colorimetric assay involves two steps. Sample is first incubated with a known amount of hydrogen peroxide. Sample converts hydrogen peroxide to water and oxygen. The ratio is proportional to the concentration of catalase. The enzyme is stopped and the remaining hydrogen peroxide, following a fixed incubation period, is determined using a chromogen. The resulting absorbance is measured at 405 nm and the obtained results are expressed as U/L.

Components

- Buffered Substrate Solution
(*R1a (Buffer) + R1b [stock stable substrate solution (SSSS)]*).
- R2: Stopper and Chromogen Solution
- Calibrator

Specifications

- Colorimetric
- Manuel – spectrophotometric
- Fully Automated
- All reagents are liquid
- Ready to use
- Reagents are more stable and have long lifetimes
- Suitable for biological fluids, tissue/cell homogenates