

Certificate of Analysis

Product Name: Lipase Assay Kit

Catalog No.: Z5030051

Shipping Condition: Room Temperature

Storage Condition: Store all components at 4°C

Shelf Life: 12 months from the date of receipt under proper storage conditions

Description

LIPASE catalyzes the hydrolysis of ester bonds on the glycerol backbone of a lipid substrate. In humans, pancreatic lipase is the key enzyme responsible for breaking down fats in the digestive system by converting triglycerides to monoglycerides and free fatty acids. Human pancreatic lipase and its related protein 2 are the main lipases secreted by the pancreas. In acute pancreatitis, lipase levels can rise 5 to 10-fold within 24 to 48 hours. Increased activities have also been associated with pancreatic duct obstruction, pancreatic cancer, kidney disease, salivary gland inflammation, bowel obstruction, and other pancreatic diseases. Decreased levels may indicate permanent damage to lipase-producing cells in the pancreas.

Simple, direct and automation-ready procedures for measuring lipase activity are very desirable. BioChain[®] Lipase Assay is based on an improved dimercaptopropanol tributyrates (BALB) method, in which SH groups formed from lipase cleavage of BALB react with 5,5'-dithiobis(2-nitrobenzoic acid) (DTNB) to form a yellow colored product. The color intensity, measured at 412 nm, is proportionate to the enzyme activity in the sample.

Testing Data:

Samples were assayed in duplicate using the 96-well plate protocol. Lipase activities were 809 ± 15 U/L for mouse serum, 959 ± 23 U/L for rat plasma, 665 ± 14 U/L for rat serum, 44 ± 1 U/L for goat serum, 80 ± 1 U/L for bovine serum, 75 ± 6 U/L for human serum and 52 ± 2 U/L for a human plasma sample.

Components

1. One Kit
2. User Manual
3. Certificate of Analysis
4. MSDS

FOR IN VITRO RESEARCH USE ONLY

APPROVED BY: _____

