

Acyl-CoA Synthase Activity Assay kit

Acyl-CoA Synthetase (ACS) is a key enzyme in fatty acid metabolism, which catalyzes the binding of fatty acids to coenzyme A by consuming ATP to produce activated acyl-CoA. The enzyme is the initial step of fatty acid beta-oxidation, and the activated acyl-CoA needs to enter the mitochondrial matrix through the carnitine transport system for subsequent decomposition. In the liver, activated acyl-CoA can be used as an energy metabolic substrate for beta-oxidation, as well as a precursor for the synthesis of triglycerides and phospholipids. In the presence of ATP and Mg^{2+} , acyl-CoA synthetase catalyzes the binding of fatty acids to coenzyme A to form acyl-CoA. Acyl-CoA oxidase (ACO) catalyzes the formation of hydrogen peroxide, and hydrogen peroxide, 4-AAP and TOOS produce purplish red products under the action of peroxidase, with a characteristic absorption peak at 550 nm, which can be used to calculate ACS activity.

Catalog No.	250076
Size	50 Assays / 100 Assays
Product Category	Colorimetric Assay
Detection Method	Spectrophotometry / Micro-Plate Reader
Storage/Stability	-20°C/6 months
Shipping	Gel Packs