

LIPASE

Source:	Human Pancreas	Purity:	Partially Purified
Form:	Liquid	Storage:	-80°C

Lipase is a glycoprotein with at least two known isoenzymes. It is very non-specific, catalyzing the breakdown of most triglycerides. Lipase is somewhat unusual in that its common substrates (triglycerides) are not soluble in water and therefore must be emulsified in order to be hydrolyzed by lipase. This emulsification is performed in vivo by bile salts. Lipase can only act on the surface of the dispersed substrate, and in addition requires a cofactor, colipase, which helps it attach to this surface.

The main clinical utility of lipase along with amylase is for the diagnosis of acute pancreatitis. Although both are usually measured, lipase is far superior to amylase as a marker for pancreatitis, reaching 95% sensitivity and specificity. Lipase assay methods are extremely variable and may use emulsified triglycerides or water soluble analogs. Intraassay variability is one of the main limitations of lipase's clinical utility. Other diagnostic applications of lipase have been occasionally reported including obstruction of the pancreatic duct and pancreatic cancer, but in general the main utility of lipase is limited to acute pancreatitis.







