

Name of the test

Lipase, LPS

What is the test used for?

The test determines the lipase level in the blood.

Lipase is an enzyme, produced by the pancreas and secreted in the duodenum through pancreatic duct to digest dietary fats.

Normally, lipase concentration in the blood is low, but when the injury of pancreatic cells or pancreatic duct obstruction occurs, blood lipase levels rise.

When the test is ordered?

Lipase test is mainly performed to diagnose and monitor acute pancreatitis, also for some other diseases. It should be noted, that lipase test is less informative for chronic pancreatitis, as lipase level remains elevated for a prolonged period and clinical evaluation of progress is difficult.

Usually, lipase and amylase tests are ordered together. In acute pancreatitis, the lipase and amylase levels elevate almost together, but lipase level remains high for a long time.

How is the test performed?

A blood sample is taken from a vein.

How to prepare for the test?

The lipase test does not require any special preparation.

Some medications (e.g. thiazide diuretics, codeine, indomethacin, cholinergic drugs, oral contraceptives etc.) may lead to increased lipase levels, so relevant instructions should be received from your doctor.

Interpretation of results

Various pancreatic diseases can cause increased lipase levels. In acute pancreatitis lipase concentration in the blood is very high (e.g. 5-10 times higher than the upper range of normal).

Usually, blood lipase level rises after 4-8 hour of an acute pancreatitis attack and remains elevated for 7-14 days. Severity of acute pancreatitis attack could not be assessed by the lipase level.

The pancreatic cancer, pancreatic duct obstruction and some other diseases may cause lipase high levels.

Low levels of lipase may be due to the damage of lipase producing cells in various diseases, e.g. Mucoviscidosis.