London Health Sciences Centre
St JOSEPH'S HEALTH CARE LONDON
Pathology and Laboratory Medicine

FECAL ELASTASE

Orderable - ELAS

Turnaround Time: 30 days

Laboratory:
Core Lab

Requisition:
GENERAL LABORATORY REQUISITION

Method of Analysis:
ELISA

Test Schedule:
Referred out Monday-Thursday

Referred Out Location:
In-Common Laboratories

Alternate Name(s):

Elastase 1

Specimen:

Random stool

Collection Information:

Collect a minimum of 5 g of random stool in a sterile container and freeze before sending.

This test is available to London Health Sciences Centre patients of Dr. April Price, Dr. Brian Lyttle, Dr. Heather Racz, Dr. James Lewis, Dr. Sandra Giangioppo, Dr.Dirk Bock, Dr. Kevin Bax, Dr. Dhandapani Ashok, Dr. Tara Mullowney and Dr. Nadeem Hussain. Specimens from outside laboratories will not be processed

Reference Ranges:

Strongly suggestive of Pancreatic Insufficiency:	Suggestive of moderate Pancreatic Dysfunction, close to the threshold for developing Pancreatic Insufficiency	Suggestive of Pancreatic Sufficiency:
<100 µg/g	100 - 200 µg/g	≥200 µg/g

Interpretive Comments:

Fecal elastase refers to the testing of the concentration of the pancreatic elastase-1 enzyme found in fecal matter with an enzyme-linked immunosorbent assay (ELISA). Results of this test can give a good indication of exocrine pancreatic status and is less invasive and expensive that the current "gold standard", secretin-cholecystokinin test.[1] Levels of fecal elastase lower than 200 µg / g of stool indicate an exocrine

insufficiency. Correlations between low levels and chronic pancreatitis[2] and cancer[3] have been reported.

References:

1. Molinari, I., et al., *Fecal chymotrypsin and elastase-1 determination on one single stool collected at random: diagnostic value for exocrine pancreatic status.* Clin Biochem, 2004. **37**(9): p. 758-76

2. Fecal Elastase 1 ELISA For Exocrine Pancreatic Insufficiency: Comparison With ERCP-Morphology And Fecal Fat Excretion

3. Role of Fecal Elastase 1 in Pancreatic Cancer: A Pilot Study

Storage and Shipment:

The specimen must be stored and shipped frozen.