IDEXX provides guidelines on utilizing the feline and canine pancreas-specific lipase tests to assess pancreatic health

The canine pancreas-specific lipase (cPL) tests—the SNAP® cPL™ Test and Spec cPL® Test—and the feline pancreas-specific lipase (fPL) tests—the SNAP® fPL™ Test and Spec fPL® Test—have traditionally been used to help confirm or rule out suspicion of pancreatitis in the clinically sick patient. They are currently the most sensitive and specific tests available to diagnose pancreatitis in dogs and cats.¹ Because these assays detect only serum pancreas-specific lipase, they can also be used to evaluate the overall health of the pancreas on routine diagnostic testing.

How to use the cPL and fPL tests in sick animals

Pancreatitis is the most common exocrine pancreatic disease in both dogs and cats.

In the dog, clinical signs that should prompt testing for pancreatitis include vomiting, anorexia and/or abdominal pain. The SNAP cPL Test can be immediately performed pet-side or the Spec cPL Test can be requested from the reference laboratory. If the SNAP cPL Test results are abnormal, veterinarians are encouraged to perform the Spec cPL Test as a follow-up to establish a baseline cPL concentration and to monitor treatment. The new extended dynamic range for the Spec cPL Test allows veterinarians to monitor responses to therapy more effectively. It is important to keep in mind that a diagnosis of pancreatitis does not exclude the possibility of a concurrent disease, such as gastroenteritis, or a gastrointestinal foreign body, which might even be the primary cause of the dog’s clinical signs.

Cats with pancreatitis generally have more nonspecific signs that may include lethargy, decreased appetite, dehydration, weight loss, vomiting, and diarrhea. Most cases of feline pancreatitis are idiopathic, and the disease is frequently associated with other concurrent conditions, including inflammatory bowel disease, cholangitis, cholangiohepatitis, hepatic lipidosis, and diabetes mellitus.² In cats presenting with clinical signs, the SNAP fPL Test can be immediately performed pet-side or the Spec fPL Test can be requested from the reference laboratory. If the SNAP fPL Test results are abnormal, veterinarians are encouraged to perform the Spec fPL Test as a follow-up to establish a baseline fPL concentration and to monitor treatment.

How to use the cPL and fPL tests in clinically normal animals

In a clinically healthy dog or cat, pancreatic health can also be evaluated with the Spec cPL Test or the Spec fPL Test. Similar to apparently healthy animals with increased liver enzymes, not all animals with pancreatic disease show clinical signs. Mild pancreatic lesions can occur in clinically healthy animals and pancreatic inflammation is common in a wide variety of clinical conditions.²⁻⁴ Pancreatic health may be affected by concurrent diseases, certain drugs, breed predisposition, trauma, ischemia, and dietary factors. Untreated chronic pancreatic inflammation can lead to more serious clinical conditions, including diabetes mellitus and exocrine pancreatic insufficiency.⁵ Obtaining a Spec cPL Test or a Spec fPL Test as part of routine wellness testing in canine and feline patients may help you identify subclinical disease in patients.

IDEXX Reference Laboratories provides updated Spec cPL Test and Spec fPL Test reporting

To simplify laboratory reports, a comment will no longer be provided when results are normal. When results are abnormal, comments included on your patient reports provide guidance to help interpret results in animals with and without clinical signs of pancreatitis.

Please see the algorithms on the following pages for evaluating cPL and fPL test results in all of your patients.
Algorithm for interpreting canine pancreas-specific lipase (cPL) in clinically healthy and sick dogs

**cPL**

- **Normal**
  - Clinically healthy dog
    - **No**
      - Pancreatitis highly unlikely
      - Consider additional diagnostics, including imaging
      - Recheck cPL in 2–3 weeks if healthy or stable; sooner if clinical signs develop or worsen
      - Consider low-fat diet with other treatment if cPL is abnormal
    - **Yes**
      - Clinical signs or other diagnostic findings suggestive of pancreatitis

- **Abnormal**
  - Sick dog
    - **Yes**
      - Subclinical pancreatitis likely
      - Review history with owner to confirm no clinical signs
      - Increase owner awareness for risk of developing clinical pancreatitis
      - Manage primary disease
      - Monitor closely for development of clinical signs of pancreatitis
      - Recheck cPL once primary disease has resolved; sooner if clinical signs develop
    - **No**
      - Clinical signs and other diagnostic findings suggestive of pancreatitis
      - Pancreatic inflammation concurrent with other primary disease likely
      - Treat appropriately
      - Investigate for risk factors and concurrent diseases, including gastroenteritis or foreign body
      - Monitor cPL to help assess response to treatment
  - Clinically healthy dog
    - **Yes**
      - Pancreatitis highly likely
    - **No**
      - Clinical signs and other diagnostic findings suggestive of pancreatitis

**Clinically healthy dog**

- **No**
  - Pancreatitis highly unlikely
  - Consider additional diagnostics, including imaging
  - Recheck cPL in 2–3 weeks if healthy or stable; sooner if clinical signs develop or worsen
  - Consider low-fat diet with other treatment if cPL is abnormal
- **Yes**
  - Clinical signs or other diagnostic findings suggestive of pancreatitis

**Sick dog**

- **Yes**
  - Subclinical pancreatitis likely
  - Review history with owner to confirm no clinical signs
  - Increase owner awareness for risk of developing clinical pancreatitis
  - Manage primary disease
  - Monitor closely for development of clinical signs of pancreatitis
  - Recheck cPL once primary disease has resolved; sooner if clinical signs develop
- **No**
  - Clinical signs and other diagnostic findings suggestive of pancreatitis
  - Pancreatic inflammation concurrent with other primary disease likely
  - Treat appropriately
  - Investigate for risk factors and concurrent diseases, including gastroenteritis or foreign body
  - Monitor cPL to help assess response to treatment
Algorithm for interpreting feline pancreas-specific lipase (fPL) in clinically healthy and sick cats

**fPL**

**Normal**

- Clinically healthy cat
  - Clinical signs or other diagnostic findings consistent of pancreatitis
    - No
    - Yes
      - Pancreatitis highly unlikely
      - Consider additional diagnostics, including imaging
      - Recheck fPL in 2–3 weeks if healthy or stable; sooner if clinical signs develop or worsen

**Abnormal**

- Sick cat
  - Other diagnostic findings suggestive of pancreatitis
    - Yes
    - No
      - No
      - Yes
        - Subclinical pancreatitis likely
          - Review history with owner to confirm no clinical signs
          - Increase owner awareness for risk of developing clinical pancreatitis and diabetes mellitus
          - Manage primary disease
          - Monitor closely for development of clinical signs of pancreatitis
          - Recheck fPL once primary disease has resolved; sooner if clinical signs develop

- Clinically healthy cat
  - Clinical signs and other diagnostic findings suggestive of pancreatitis
    - Yes
    - No
    - No
    - Yes
      - Pancreatic inflammation concurrent with other primary disease likely
        - Pancreatitis highly likely
        - Treat appropriately
        - Investigate for risk factors
        - Evaluate for concurrent diseases, including inflammatory bowel disease, hepatitis, hepatic lipidosis and/or diabetes mellitus.
        - Monitor fPL to help assess response to treatment
### Ordering information

The Spec cPL and Spec fPL tests are available for ordering as stand-alone tests, as add-on tests or in combination with a variety of profiles from IDEXX Reference Laboratories.

To order the SNAP cPL and SNAP fPL tests, visit idexx.com/order, call 1-888-79-IDEXX, or talk with your IDEXX Veterinary Diagnostic Consultant.

<table>
<thead>
<tr>
<th>Test code</th>
<th>Test name and contents</th>
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| **2500** | **Senior Screen with Spec cPL® Test—Canine**  
Chem 25 with IDEXX SDMA®, triglycerides, IDEXX CBC-Select™, Spec cPL® Test, total T₄, urinalysis  
Specimen requirements: 2 mL serum after an overnight fast, 1 mL LTT, 5 mL urine in a sterile container  
Turnaround time: 1–2 working days |
| **2377** | **Total Health™ Plus Profile with Spec cPL® Test—Canine**  
Chem 27 with IDEXX SDMA®, triglycerides, IDEXX CBC-Select™, Spec cPL® Test, total T₄  
Specimen requirements: 2 mL serum after an overnight fast, 1 mL LTT  
Turnaround time: 1–2 working days |
| **1849** | **Spec cPL® Test—Canine**  
Add-on  
Canine pancreas-specific lipase  
Specimen requirements: 1 mL serum (fasting specimen preferred)  
Turnaround time: 1–2 working days |
| **2743** | **Senior Screen with Spec fPL® Test—Feline**  
Chem 25 with IDEXX SDMA®, IDEXX CBC-Select™, Spec fPL® Test, total T₄, urinalysis  
Specimen requirements: 2 mL serum (fasting specimen preferred), 1 mL LTT, 5 mL urine in a sterile container  
Turnaround time: 1–2 working days |
| **2732** | **ADRChek® Profile Plus with Spec fPL® Test—Feline**  
Chem 25 with IDEXX SDMA®, IDEXX CBC-Select™, Spec fPL® Test, total T₄  
Specimen requirements: 2 mL serum (fasting specimen preferred), 1 mL LTT  
Turnaround time: 1–2 working days |

### Customer support services

IDEXX supports your practice with our customer support, technical support, and medical consulting services teams, including our diagnostic support veterinarians and board-certified veterinary specialists. Call 1-888-433-9987 if you have questions.

### References