

Actim[®] Pancreatitis

Ruling out acute pancreatitis
in a timely manner.

- ✓ Actim[®] Pancreatitis is a unique point-of-care test that detects trypsinogen-2 in urine from 50 µg/l to 100,000 µg/l.
- ✓ Thanks to its optimal sensitivity, Actim Pancreatitis reliably rules out acute pancreatitis.
- ✓ The test results are available at the patients' bedside, in just 5 minutes.

High
negative
predictive
value of
≈99%



How Actim Pancreatitis works

Acute pancreatitis is a common inflammatory condition associated with high morbidity, mortality, and hospitalization costs. Early treatment is critical to avoid complications, yet the non-specific symptoms make diagnosing this condition particularly challenging.

The Actim Pancreatitis rapid test is based on highly specific monoclonal antibodies that detect the pancreatic enzyme trypsinogen-2 in urine. Trypsinogen-2 is the optimal biomarker for acute pancreatitis. It is detectable at any stage of the inflammation – from the beginning until days after the symptoms have started to appear.

As Actim Pancreatitis detects trypsinogen-2 concentrations as low as 50 µg/l and up to 100,000 µg/l, it can reliably detect both advanced symptomatic acute pancreatitis and early asymptomatic pancreatitis.

Actim Pancreatitis in a nutshell

- Reliably rules out acute pancreatitis with a simple urine test.
- Can be used at any stage of the disease.
- Gives test results at the bedside of the patient in just 5 minutes.
- No extra laboratory resources or sample processing are required.
- Individually packed dipsticks are hygienic and convenient.

How to use Actim Pancreatitis



Figures:
1. & 2. Activate the test
3. Interpret the results

Based on the unique biomarker trypsinogen-2, Actim Pancreatitis is the only rapid test that can identify acute pancreatitis at any phase of the inflammation.

How Actim Pancreatitis helps

There is currently no golden standard test for diagnosing acute pancreatitis. Typically, the diagnosis is based on the biomarkers amylase and lipase. However, amylase starts to decline after 1–3 days and its sensitivity as an indicator to detect acute pancreatitis is not optimal. While lipase is a more stable biomarker, its sensitivity is not optimal either. CT scans can be used as an alternative to diagnose acute pancreatitis, but they are expensive and they involve the exposure of the patient to radiation.

Actim Pancreatitis is the first and only dipstick test that detects trypsinogen-2. The test is highly sensitive in detecting pancreatitis: it can identify even those patients who would likely be missed with amylase and lipase tests (Table 1). Thanks to its high (99 %) negative predictive value (NPV), Actim Pancreatitis can reliably rule out acute pancreatitis. For this reason, negative test results do not have to be verified with CT scans or other tests (Table 2).

Pancreatitis resulting from endoscopic retrograde cholangiopancreatography (ERCP) can also be excluded, allowing low-risk patients to be discharged soon after the procedure.

TABLE 1. Actim Pancreatitis surpasses both lipase and amylase testing in detecting and ruling out acute pancreatitis (Jang et al., 2007).

Test type	Sensitivity %	Specificity %
Actim Pancreatitis	100	96
Lipase 3N	53	99
Amylase 3N	41	95

TABLE 2. Actim Pancreatitis is a highly sensitive and specific screening tool for acute pancreatitis. With a high NPV, Actim Pancreatitis can be used to confidently identify patients that are not experiencing pancreatitis, also among those at risk of post-ERCP or post-pancreatic surgery acute pancreatitis.

Reference	Subjects	AP	Sens. %	Spec. %	PPV %	NPV %
Kemppainen et al. 1997	500	53	94	95	68	99
Kylänpää-Bäck et al. 2000	525	45	96	92	54	99,6
Kylänpää-Bäck et al. 2002	237	29	93	92	63	99
Chen et al. 2005	165	67	90	86	81	92
Jang et al. 2007	191	19	100	96	-	-
Post-ERCP patients						
Kemppainen et al., 1997 (quantitative test, 6h post operation)	106	11	81	97	-	-
Sankaralingam et al., 2007 (dipstick test, 1h post operation)	29	5	100	91	66	100
Sankaralingam et al., 2007 (dipstick test, 4h post operation)	29	5	100	96	80	100
Post-pancreatic surgery						
S. Raty, J. Sand and I. Nordback, 2007	53	13	100	92	81	100

Ordering information

Product	Product code
Actim Pancreatitis, 20 tests	32732ETAC
Actim Pancreatitis, 10 tests	32731ETAC
Actim Pancreatitis Controls	32700ETAC



✓ **The test kit contains all the materials needed - no extra laboratory equipment is required to perform the test.**

🌡️ **The test kit can be stored at room temperature.**

Actim Oy

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The Actim Pancreatitis Controls are intended to be used with the Actim Pancreatitis test for external quality control.

Because trypsinogen-2 levels remain elevated for several days, the Actim Pancreatitis test can be performed even if a patient doesn't immediately contact a doctor.

Selected references

1. Abraham P. Point-of-care urine trypsinogen-2 test for diagnosis of acute pancreatitis. The Journal of the Association of Physicians of India (2011) 59: 231-232.
2. Chen YT et al. Rapid Urinary Trypsinogen-2 Test Strip in the Diagnosis of Acute Pancreatitis. Pancreas (2005) 30:243-247.
3. Delcenserie et al. Diagnostic de la pancreatite aigue par detection du trypsinogene II urinaire (pancreatitis test). Communication orale: Club Farancais du pancreas (1999).
4. Hedstrom J et al. Urine trypsinogen-2 as a marker of acute pancreatitis. Clin Chem (1996) 42:685-690.
5. Jang T et al. Point-of-care Urine Trypsinogen Testing for the Diagnosis of Pancreatitis. Acad. Emerg. Med. (2007) 14:29-34.
6. Janisch NH et al. Advances in Management of Acute Pancreatitis. Gastroenterol Clin North Am 2016;45:1-8.
7. Kylanpaa-Back M-L et al. Reliable screening for acute pancreatitis with rapid urine trypsinogen-2 test strip. Br J Surg (2000), 87:49-52.
8. Kylanpaa-Back M-L et al. Comparison of urine trypsinogen-2 test strip with serum lipase in the diagnosis of acute pancreatitis. Hepato-Gastroenterology (2002) 49:1130-1134.
9. Kempainen E et al. Rapid measurement of urinary trypsinogen-2 as a screening test for acute pancreatitis. N Engl J Med (1997) 336: 1788-1793.
10. Sankaralingam S et al. Use of the urinary trypsinogen-2 dip stick test in early diagnosis of pancreatitis after endoscopic retrograde cholangiopancreatography. Surg Endosc (2007) 21:1312-1315.

The full reference list can be on our website www.actimtest.com.