

Actim[®] Pancreatitis

A NOVEL WAY TO DIAGNOSE ACUTE PANCREATITIS ON THE SPOT

Actim Pancreatitis is a unique point-of-care test to reliably detect or rule out acute pancreatitis. Thanks to the easy-to-use urine dipstick test, testing can be performed at the bedside and the results are available in just 5 minutes.

Acute pancreatitis is a common inflammatory condition associated with high morbidity, mortality, and hospitalization costs. Early treatment is critical to avoid complications, yet the nonspecific symptoms make diagnosis challenging.

Based on the most accurate biomarker available, Actim Pancreatitis is the only test that can identify acute pancreatitis at any phase of inflammation. As a result, severe pancreatitis is diagnosed early, patients can be treated efficiently, and unnecessary treatment and costs are avoided.

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HOW ACTIM PANCREATITIS WORKS

The **Actim Pancreatitis** test is based on unique, highly specific antibodies that detect the pancreatic enzyme **trypsinogen-2** in urine. Trypsinogen-2 is the optimal biomarker for acute pancreatitis; it is **present throughout pancreatic inflammation**, from the beginning to days after symptoms started.

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

ACTIM PANCREATITIS: KEY FACTS

- Reliably rules out acute pancreatitis with a simple urine test
- Can be used at any stage of disease
- Easy-to-use one-step dipstick test
- Gives test results at the bedside in just 5 minutes
- No laboratory resources or sample processing needed
- Individually packed dipsticks are economic, hygienic, and convenient

POST-ERCP pancreatitis is not always symptomatic, but acute pancreatitis will develop in approximately **100%** of patients.

HOW TO USE ACTIM PANCREATITIS

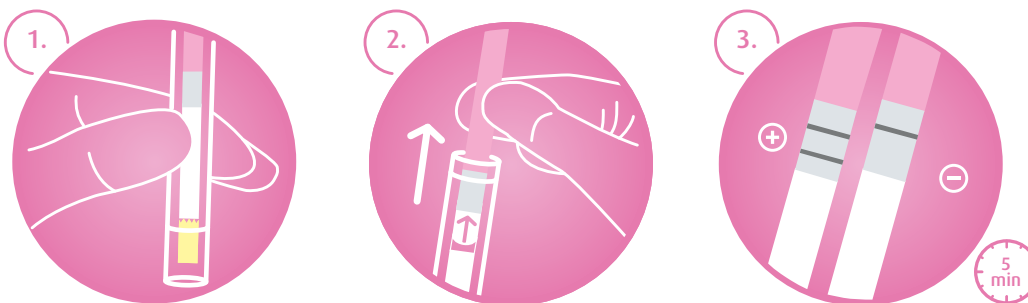


FIGURE 1.
1. & 2. Activate the test
3. Interpret results



HOW ACTIM PANCREATITIS HELPS

There is currently no golden standard test for diagnosing acute pancreatitis. Typically, diagnosis is based on the relatively nonsensitive biomarkers amylase and lipase. However, amylase starts to decline after just 1-3 days and is not specific to the pancreas. While lipase is more specific, its sensitivity as an indicator is less than optimal. Diagnosis can also be established on CT scans, but they are challenging, expensive, and involve exposure to radiation.

Actim Pancreatitis is the first and only dipstick test that enables diagnosis of acute pancreatitis on the spot – without a need for sample processing or laboratory equipment. Rapid and reliable diagnosis **allows timely treatment** and **reduces diagnostic costs**.

Actim Pancreatitis 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 extremely **high (99 %) negative predictive value (NPV)**, Actim Pancreatitis can reliably rule out pancreatitis even in asymptomatic patients. 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.

**A HIGH
NEGATIVE
PREDICTIVE
VALUE (NPV)**
helps to avoid
unnecessary and
costly CT scans.

TABLE 1. Actim Pancreatitis surpasses both lipase and amylase testing in detecting and ruling out pancreatitis with 100% sensitivity. (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 is able to confidently determine patients that are not experiencing pancreatitis, also among those at risk of post-ERCP 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

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 found on our website.

The test kit contains all necessary materials and can be stored at room temperature.



Because **TRYPsinogen-2 LEVELS STAY ELEVATED FOR SEVERAL DAYS,** the Actim Pancreatitis test can be performed even if a patient doesn't immediately contact a doctor.

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Ordering information

Actim Pancreatitis 20 test kit	32732ETAC
Actim Pancreatitis 10 test kit	32731ETAC
Actim Pancreatitis Controls	32700ETAC