

THE solution for stool samples!

Stool sample tubes with dipstick:

accurate
hygienic
simple
time-saving



Excellent correlation
with alternative methods

Easy preparation of a defined stool-buffer solution



optimized!
easier handling

- ▶ No weighing of faecal material, no stool contact
- ▶ Centrifuging not necessary
- ▶ Dipstick with click connector facilitates handling
- ▶ For direct use on automates
- ▶ Tubes available with or without buffer
- ▶ Free sample on request



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Stool sample tubes

For preparation of a defined stool buffer solution

Accurate analysis of faecal material - a challenge in laboratory diagnostics

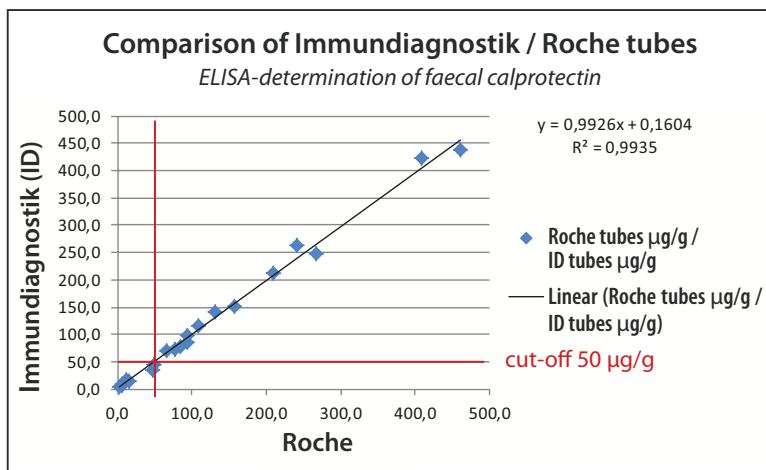
The preparation of a defined stool sample solution is critical for the accurate determination of faecal parameters by ELISA. Conventional methods require sample extraction steps such as stool weighing and a centrifugation step. During sampling and weighing, the lab personnel is confronted with direct stool contact and the difficulty of exact weighing of faecal material with varying consistency.

Stool sample tubes with dipstick for a hygienic sample preparation

The stool sample tube by Immundiagnostik enables the hygienic preparation of a defined faecal sample solution with minimal stool contact and without multiple steps that require special equipment. The innovative tube contains a dipstick with notches that hold exactly 15 mg of stool and thus facilitates clean and exact sampling. After the stick has been placed back into the tube (thereby stripping off excess material), a simple shaking step is sufficient to dissolve the faecal material in the buffer (manual see rear page). The suspension is now ready-to-use for the ELISA-analysis.

Immundiagnostik and Roche tubes correlate in ELISA-Analysis

We have compared the quality of stool sample solutions prepared with our tubes and with the conventional stool extraction system by Roche Diagnostics GmbH in the ELISA-diagnostics of several faecal parameter. As depicted in the graph below, we have determined the calprotectin concentration in 20 stool samples with established gastroenterological diagnosis utilizing our monoclonal *IDK*[®] Calprotectin ELISA. For sample preparation, we used our tubes as well as the Roche tubes. The latter have been used according to the manufacturers manual, including exact weighing of faecal material.




Accurate calprotectin determination

The results of the calprotectin analysis with our tubes compared to the Roche tubes exhibit an excellent correlation with a coefficient of 0,99 and a slope of 0,99 (see figure on the left). Therefore, both stool sample preparation methods do not differ in the ELISA-determination of calprotectin. Especially in the lower clinically relevant concentration range there is no diagnostic discrepancy. Further ELISA-tests with other faecal parameters produced similar results with high correlations.

Stool sample tubes with broad application in ELISA-analysis

Our stool sample tubes are suited for the ELISA-analysis of a variety of faecal parameter in gastroenterology. The stool-buffer sample solution can simply be processed according to the respective ELISA-manual, for example on automates. Immundiagnostik offers the sample tubes empty or filled with a buffer solution which corresponds with the respective ELISA at a dilution of 1:50 or 1:100 (see table on the right page).

Stool sample tubes combine perfectly with Immundiagnostik's stool diagnostics

Stool sample tubes	Product name	Buffer-dilution	Catalogue number
Empty tubes	all products	-	K 6998SAS
 <p>IDK Extract®</p> <p>Tube filled with one extraction buffer</p>	IDK® Calprotectin	1:100	K 6999
	IDK® Pancreatic Elastase		
	Lactoferrin		
	IDK® Hemoglobin		
	IDK® Hemo-Haptoglobin-Complex		
	anti-tissue Transglutaminase Ab		
	anti-Gliadin Ab		
	IDK® sIgA		
	IDK® α ₁ -Antitrypsin		
	Albumin		
	IDK® EDN		
	Lysozyme		
β-Defensin 2			
IDK® Bile acids			
Tubes filled with ELISA-specific buffer	for all other products	on request	



Stool sample tubes:

The superior sample preparation system in stool diagnostics

Our stool sample tubes are ideal for the preparation of defined stool preparation solutions that are ready-to-use for the ELISA-analysis of faecal parameters. Minimal stool contact combined with an easy and time-saving handling outmatch alternative sample preparation systems – a genuine facilitation of the daily routine in the laboratory diagnostics of faecal parameters in gastroenterology.

Preparation of a stool sample solution

Design of the stool preparation system

Cat. no. K 6998SAS: unfilled stool sample system
 Cat. no. K 6999: stool sample preparation system filled with 1.5 ml ready-to-use *IDK Extract*[®]



Stool sample tube



Yellow: Dipstick with click connector

Blue: Cone-shaped insert to strip off excessive stool

Preparations for stool sampling

Processing of faecal material

- The stool sample has to be thawed. For particularly heterogeneous samples, we recommend a mechanical homogenisation using an applicator, inoculation loop or similar device.
- K 6998SAS:** Dilute the extraction buffer concentrate according to the manual of the kit used. Then add the volume of extraction buffer stated in the manual to the empty sample tube. The dilution factor of the stool suspension depends on the amount of stool sampled and the volume of the buffer (see dilution table).
K 6999: The sample tube is already filled with the *IDK Extract*[®] volume ordered, it is not necessary to add any more buffer.

Dilution table

Dilution with 1.5 ml buffer:		Dilution with 0.75 ml buffer:	
Applied amount of stool:	15 mg	Applied amount of stool:	15 mg
Buffer volume:	1,5 ml	Buffer volume:	0,75 ml
Total dilution factor:	1:100	Total dilution factor:	1:50

Please note: for fluid stool samples, 15 mg = 15 µl

Application of the stool sample tube

1. Remove dipstick

Open the **upper yellow part** of the cap and remove the attached dipstick. The blue cone-shaped insert remains on the tube!

2. Obtain stool sample

Insert the dipstick into the stool at 3 different sites. Make sure that the notches at the lower part of the stick are covered completely with stool.

3. Place dipstick back into the tube

Stick the dipstick with the attached stool **only once** back into the sample tube. Excess material will be stripped off by the cone-shaped insert, letting 15 mg of sample into the tube.

4. Prepare stool sample suspension

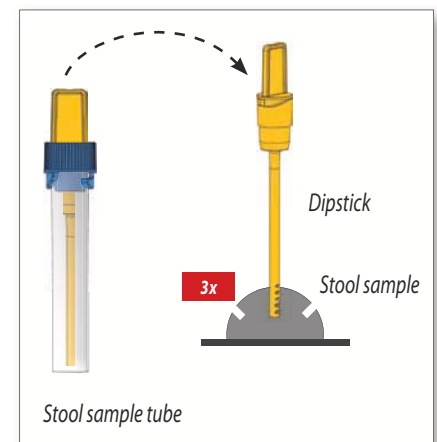
Close the tube properly by turning until you hear the yellow shutter click. Then shake well until no stool sample remains in the notches and the stool is completely suspended in the extraction buffer. The suspension now contains 15 mg of stool (if the stool sample is fluid, pipet 15 µl into the tube). For details about dilutions and volumes, please refer to the dilution table.

Attention: The **stool dilution** in the sample tube **hardly changes colour**. Repeated insertion of sample into the tube will falsify the results!

5. Apply stool sample solution

Open the complete cap of the tube including the **lower blue cone-shaped insert**. The stool-buffer solution is now ready for use according to the corresponding ELISA manual.

Steps 1-2



Steps 3-4

