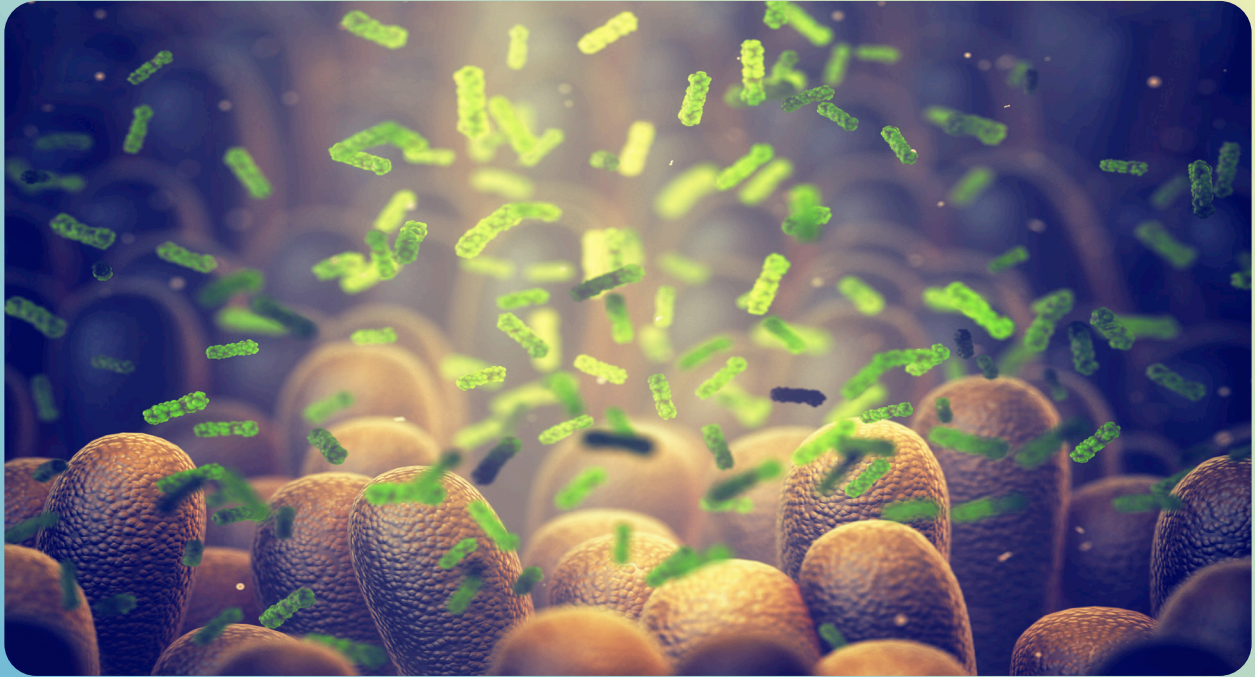


IDK[®] sIgA



ELISA for the determination of secretory IgA in stool and saliva.

- ▶ Sample Sizes: 15 mg stool, 10 μ L saliva
- ▶ FDA Class 1 Exempt
- ▶ Health Canada Licensed



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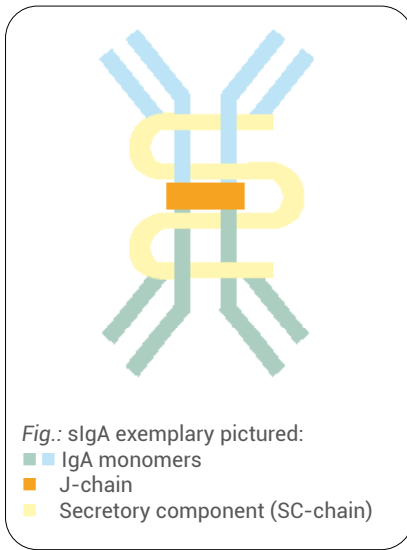
Discover. Develop. Apply.

slgA (secretory IgA)

A Biomarker to Help Investigate the Status of the Intestinal Mucosa's Immunological Barrier

What is slgA?

Secretory IgA (slgA) is an immunoglobulin produced by plasma cells in the lamina propria. It plays a crucial role in mucosal immune function, serving as the first line of defense for mucous membranes against pathogens, enteric toxins, and food allergens. In healthy individuals, slgA forms a protective layer on mucosal surfaces and is present in body secretions such as saliva, tears, nasal and tracheobronchial mucus, colostrum, breast milk, gastrointestinal secretions, and stool.



The formation of slgA is independent of the serum IgA synthesis. Thus, a deficiency in serum IgA does not necessarily imply a lack of slgA. Structurally, slgA consists of two IgA monomers linked by a J-chain and includes a secretory component (SC-chain). The secretory component facilitates transport across epithelial cells and stabilizes slgA.

Due to its unique structure, slgA is more stable than IgA and is not degraded by enzymes during intestinal transit. Therefore, determining slgA in stool can be a reliable detection tool.

Once released into the intestine, slgA binds to the mucus layer. Through a process known as immune exclusion, slgA aids in the removal of antigens and pathogenic microorganisms from the intestinal lumen. By blocking access to epithelial receptors and trapping foreign bodies in mucus, slgA reduces the body's antigen load and susceptibility to infections.

Why Should You Measure slgA?

Measuring slgA concentrations in stool provides valuable insights into the activation and secretion rate of intestinal plasma cells located in the lamina propria. This measurement helps assess the status of the immunological barrier of the intestinal mucosa. Low levels of slgA indicate reduced activity of the intestinal immune system, while elevated levels suggest increased activity and local inflammation of the intestinal mucosa.

Decreased slgA concentrations in stool:

- Reduced or absent slgA may indicate immunodeficiencies.
- Suggests decreased activity of the intestinal immune system, potentially increasing susceptibility to infections or intestinal yeast overgrowth.
- Low levels can be associated with physical and mental stress, as well as inadequate nutrient intake.

Increased slgA concentrations in stool:

- Indicate heightened activity of the intestinal immune system, often due to local inflammation of the intestinal mucosa, bacterial presence, or allergic processes.
- High levels may also be observed in autoimmune diseases.

**DID YOU
KNOW** ?

Newborns and babies receive slgA through breast milk, providing passive immunity against gastrointestinal infections.

1-point Calibration or Standard Curve? It's Up to You!

The **IDK**® sIgA ELISA is offered in two versions: a standard ELISA with five calibration standards (K8870.US / KR8870) or a 1-point calibration ELISA with a single calibrator (KR8880).

Both kits utilize the same reagents and are compatible with common ELISA automation systems. The choice between the two depends on your specific requirements.

The 1-point calibration requires fewer calibrators, which need to be measured in each kit run. This allows for testing a greater number of samples per run, potentially offering cost savings.

If your software does not support the evaluation of 1-point calibration, or if you prefer to visually assess the standard curve shape yourself, we recommend using the standard curve ELISA.

If you have any questions, please feel free to send an email to our technical support team: idsupport@immundiagnostik.com

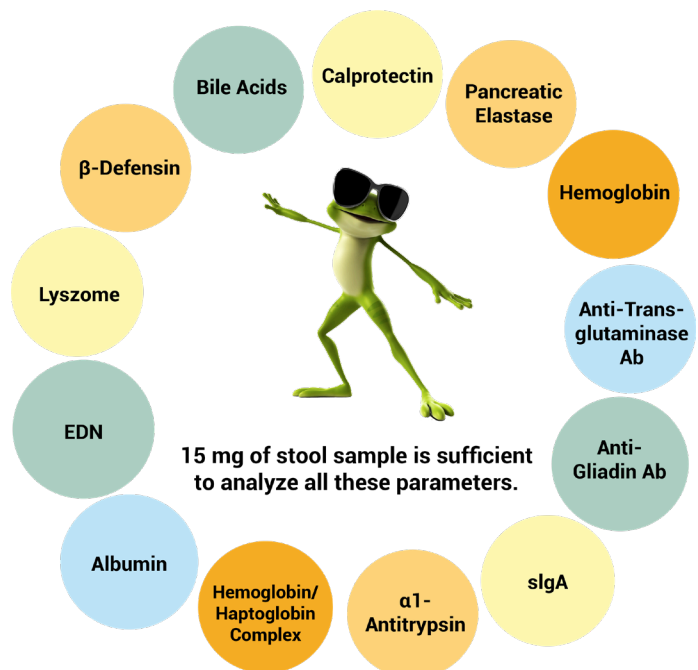
Simplified Stool Sample Preparation



Combine the **IDK**® sIgA ELISAs for stool samples with our handy and hygienic stool sample device, which is prefilled with the proprietary extraction buffer **IDK Extract**®. This allows you to perform complete stool analytics (up to 13 parameters) with one stool sample and one extraction step!

With **IDK Extract**®, you can save both time and money, allowing you to focus on your research and analysis, rather than on tedious extraction processes.

[Please contact us to discover more!](#)



Essentials of *IDK*[®] sIgA:

- Helps identify intestinal immune system disorders
- Simplified stool sample preparation with *IDK Extract*[®]
- Also available as 1-point calibration
- Complete test procedure at room temperature
- Automation possible – Contact us for more information!



<i>IDK</i> [®] sIgA	
Matrix	Stool, Saliva
Sample volume	15 mg (Stool) 10 µL (Saliva)
Test principle	ELISA
Cat. No.	K8870.US*/KR8870

<i>IDK</i> [®] sIgA (1-point calibration)	
Matrix	Stool, Saliva
Sample volume	15 mg (Stool) 10 µL (Saliva)
Test principle	ELISA
Cat. No.	KR8880

Literature:

- Strugnell RA et al. (2010) The role of secretory antibodies in infection immunity. *Nat Rev Microbiol* 8(9):656–667.
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- Michalsen A et al. (2005) Mediterranean diet or extended fasting's influence on changing the intestinal microflora, immunoglobulin A secretion and clinical outcome in patients with rheumatoid arthritis and fibromyalgia: an observational study. *BMC Complement Altern Med* 5:22
- Brandtzaeg P (1981) Transport models for secretory IgA and secretory IgM. *Clin Exp Immunol* 44(2):221-231

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