IDK® EDN (EPX)



ELISA for the determination of EDN in serum, plasma, urine and stool

Indications:

- Proof of a food allergy with immediate reaction
- Assessment of an elimination diet
- Proof of damaged integrity of the intestinal mucous membrane caused by an invasive disease (e.g. IBD, CC etc.)
- Proof of intestinal parasites



Distribuito in ITALIA da

Li StarFish S.r.I.

Via Cavour, 35
20063 Cernusco S/N (MI)
telefono 02-92150794
fax 02-92157285

info@listarfish.it
www.listarfish.it

IDK® EDN (EPX)

Discrimination between food allergy and food intolerance

EDN (eosinophil-derived neurotoxin, eosinophil protein x, EPX) measuring in stool is recommended for diagnosing a food allergy with an immediate reaction, or to test the clinical efficiency of an elimination diet. EDN measurements also support an examination about the integrity of the intestinal mucous, when looking into an inflammable intestinal disease, investigating Colon Carcinoma or testing for an intestinal parasite [5].

The classic ways of diagnosing an allergy (determine allergy specific IgE antibodies and the prick-test) are only limitedly reliable when used to determine a food allergy. For example a normal IgE level and a negative result from the prick-test does not rule out an intestinal food allergy. In this case, an EDN measurement in stool is recommended [1, 4, 6].

EDN, a cationic glycoprotein, which is released by activated eosinophiles, has strong cytotoxic characteristics and plays a large part in virus prevention. It is released by the eosinophile granules in places where eosinophiles are mainly to be found, in the skin, lungs, urogenital, gastrointestinal tract, that is in the organs which act as an entry point for pathogen. The accumulation of EDN in the intestine is associated with tissue damage.

Measuring EDN in stool can serve as an objective parameter for a current clinical or sub-clinical chronic inflammation which is noticeable in the gastrointestinal area. With Colitis ulcerosa and Crohn's disease, EDN measurement enables the prediction and the evaluation of the disease's activity [2].

Cave: Glucocorticoids may decrease the number of eosinophils. A treatment with glucocorticoids may therefore result in false-negative EDN levels. ACE inhibitors may result in falsely increased EDN levels.

The advantages:

- Proof of a food allergy with immediate reaction
- ▶ A non-invasive examination of the intestinal eosophile activity
- ▶ More specific than an slgA measurement
- ► CE marked assay
- ▶ Validated in stool, urine, serum, plasma

Universal stool sample extraction buffer *IDK Extract*®:

Complete stool analytics from one single tube

<i>IDK</i> ® EDN	
Matrix	Stool, Urine, Serum, Plasma
Sample volume	15 mg (Stool) 20 µl (Urine, Ser., Pl.)
Test principle	ELISA
Cat. No.	K 6811

also available: EDN 1-point-calibration test (K 6821)

Literature:

- 1. Bengtsson U et al. (1997) J Allergy Clin Immunol 100: 216–221
- 2. Bischoff SC et al. (1997) Dig Dis Sci 42(2): 394-403
- 3. Kim KW et al. (2013) Korean J Pediatr 56(1): 8–12
- 4. Magnusson J et al. (2003) Clin Exp Allergy 33: 1052–1059
- 5. Tischendorf FW et al. (2000) Tropical Medicine and International Health 5(12): 898-905
- 6. Kalach N et al. (2013) Clin Chem Lab Med 51(2): 351-361

Possible approach to suspected food allergy

