



## DST

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DST specializes in diagnostic solutions for allergies, food intolerances and professional diet optimization. Our allergen extract production has one of the largest offers in the market: 600 high quality, respiratory, food and environmental allergens and food extracts, including purified major and recombinant ones.

DST is certified by the TÜV Rheinland according to EN ISO 13485.



ID: MK042, Version: 000

NutriLAB

# ELISA KITS

for Food Intolerance

**DST**

A COMPANY OF  
**AESKU.GROUP**  
WE TAKE CARE OF YOUR HEALTH

**DST**

The NutriLAB kits are used for in vitro diagnostics in humans of food-specific IgG/IgG4 antibodies in serum or plasma. DST develops, manufactures and markets in vitro diagnostics for laboratory use – a variety of microtiter plate-based detection systems: ELISA (enzyme-linked immunosorbent assay) kits for diagnostics of specific IgG/IgG<sub>4</sub>.



## INTENDED USE

The NutriLAB kits are used for the quantitative determination of specific IgG/IgG<sub>4</sub> antibodies against a selection of over 600 high quality food extracts.

NutriLAB is an in vitro enzyme immunoassay for the simultaneous, quantitative measurement of food specific IgG/IgG<sub>4</sub> antibodies in human plasma or serum. It's intention is to be used as a tool to support the diagnosis of patients presenting various clinical symptoms associated with food intolerances. The advantage of the test is a non-invasive, quantitative measurement of plasma or serum samples for several food extracts or - mixes at once.

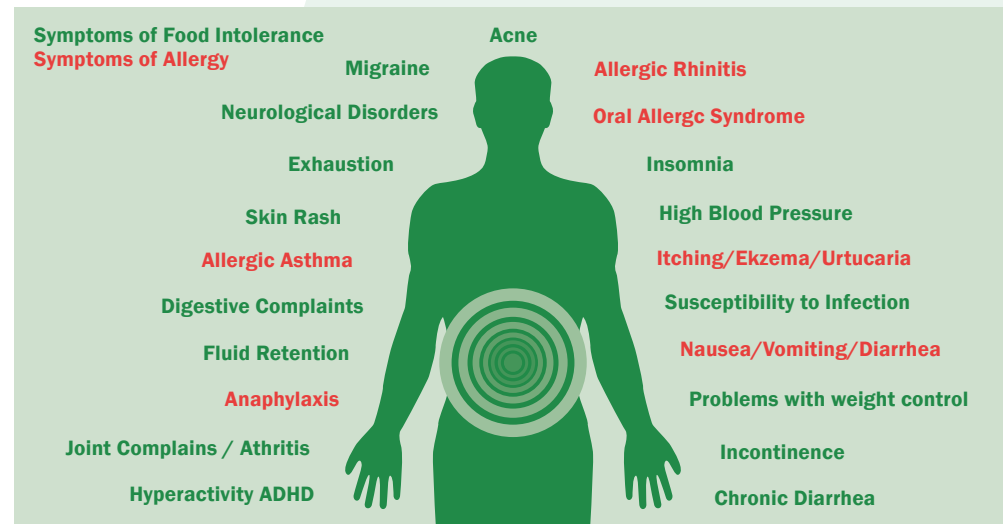
*For more information, please see Package leaflet.*

## FOOD INTOLERANCE

There is a growing trend of people showing adverse reactions to different foods, generally termed food intolerance. Symptoms include bloating, headache, fatigue, diarrhea, irritable bowel and other gastroenterological and dermatological conditions. It's estimated that in developed countries every second person is suffering from a symptom related to food intolerance.

Furthermore, food intolerance symptoms are slowly turning into a serious lifestyle problem that is generally overlooked due to difficulties in diagnosis.

The increased awareness in the general population of health and nutrition has led to an increased interest in understanding food intolerances.



## NutriLAB

### ELISA KIT FOR DETECTION OF SPECIFIC IgG/IgG<sub>4</sub> (HUMAN)

#### Test principle

NutriLAB for the detection of specific IgG/IgG<sub>4</sub> (human) is a laboratory use enzyme immunoassay for in vitro diagnostics of food intolerance in patients. Extracts from different foods are bound to the surface of the microtiter plate wells. For testing, a diluted sample (serum or plasma) is added to the wells. Specific IgG/IgG<sub>4</sub> antibodies of the sample bind to the antigens in the wells during incubation.

Non-bound components of serum or plasma are washed away after incubation of the sample. Horseradish peroxidase- coupled anti-IgG/IgG<sub>4</sub> antibodies (conjugate) are added and bind to the IgG/IgG<sub>4</sub> antibodies of the sample, the standards or controls. Subsequently, unbound detection antibodies are washed away. The color substrate TMB (3,3',5,5'-tetramethylbenzidine) is added, which is converted by the horseradish peroxidase conjugate.

The reaction is stopped by adding a stop solution. A yellow dye is formed and the respective intensity correlates with the proportional amount of locally-bound antibody. The dye formed is quantified photometrically by measuring the extinction. Test results are quantified using a point-to-point regression from the measured absorbances of the standard series.

The identified units/mL can be assigned to the respective intensity and provide the level of specific IgG/IgG<sub>4</sub> sensitization (Table 1).

## NutriLAB FEATURES AND BENEFITS

- Kit comes with step-by-step Quick Guide.
- All necessary reagents for the ELISA are included in the kit
- Requires 1.0 microliters of serum or plasma per food extract (IgG)
- Total assay time: 105 minutes (IgG)
- Detection range of specific IgG/IgG<sub>4</sub> starting from 0.35 kU/L
- The identified units/mL can be assigned to the respective intensity and provide the level of specific IgG/IgG<sub>4</sub> sensitization
- Sensitivity – 82.6 % & Specificity – 87.8 %
- Intra-assay precision/Inter-assay precision: mean coefficient of variation 4.47 %/4.61 %
- NutriLAB kits can be used with standard automated and semi-automated ELISA analyzers

**Table 1:** Correlation between U<sub>A</sub>/mL of food-specific IgG/IgG<sub>4</sub> and the sIgG/sIgG<sub>4</sub>-class mediated sensitization

food specific IgG/IgG <sub>4</sub>		
sIgG/sIgG <sub>4</sub> -class	U <sub>A</sub> /mL	Sensitization
0	0.00 – 0.34	none
1	0.35 – 0.69	very low
2	0.70 – 3.49	low – moderate
3	3.50 – 17.49	moderate
4	17.50 – 49.99	high
5	50.00 – 99.99	very high
6	≥ 100	extremely high

## NutriLAB ELISA KITS EASE OF USE, CUSTOMIZABLE PANELS.

NutriLAB ELISA kits can be coated with food extracts of your choice. DST extracts more than 600 allergens and foods at its own manufacturing facility, and because of years of research and development our allergens possess excellent reactivity and certified quality and purity. This ensures accurate and clear diagnostic results from all our ELISA kits.

- To reduce your assay time allergens are precoated on microtiter plates
- Customizable panels with a large choice of over 600 available allergens & food extracts
- Positive and negative controls included

