

# FI Scan 220 food intolerance test Instructions for use

The kit is intended for in vitro diagnostics IVD

Catalogue No. Specific antibodies MN-2021 G 220 different	Class lg	Cubatrata	_
antibodies MN-2021 G 220 different	G. 600 . B	Substrate	Format
MN-2021 G 220 different			
nutritional proteins	lgG	Antigen-coated solid phase (microarray)	2 x 21 (chip x reaction sites)

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#### 1. Purpose of the test

**The FI Scan 220** test is designed to detect human IgG against 220 different food proteins. It is a guidelinetype test designed to help the patient identify food intolerances. Food intolerance is an adverse reaction of the body to proteins in foods, manifested by chronic inflammatory processes. It is an increased reaction in the body that results in the production of immunoglobulin G (IgG) antibodies. The results of the test are presented in 4 classes, which indicate the strength of the body's immune response to different proteins in food extracts. The purpose of this test is to indicate which foods can trigger an immune response that results in adverse reactions.

**Remark.** This test does not detect food allergies (it does not detect the specific IgE antibodies responsible for rapid (type I) allergic reactions). The test detects IgG antibodies against food proteins, thus identifying foods to which the patient may be intolerant.

# 2. Clinical significance of the serological test

The FI Scan 220 food intolerance test is a guideline test and has no direct clinical relevance. It is intended to help the patient and the professionals treating him/her to more easily identify foods against which the body may have developed an IgG antibody response.

IgG antibodies are continuously produced against the foods we eat, but higher concentrations indicate a stronger response to the foods. If higher levels of IgG are detected against foods, this may identify an increased sensitivity of the body to specific proteins, which can lead to adverse reactions in the patient - this reaction is called food intolerance. The most common symptoms associated with food intolerance are headaches, gastrointestinal disturbances (e.g. bloating, constipation, diarrhoea), persistent difficulty in eating, persistent fatigue, rashes). Re-testing after 3-6 months is recommended when changing diet. Re-testing allows an assessment of whether the lifestyle and dietary changes made are working and whether the amount of intolerant foods or the intensity of the intolerance is reduced.

#### 3. Antigens

One microarray consists of 21 reaction sites (blocks). 220 different food extracts (protein mixtures) are printed per reaction site (block). A complete list of the foods that make up the FI Scan 220 food intolerance test is given in *Annex 1*.

#### 4. The principle of the test

The FI Scan 220 test is based on indirect immunofluorescence analysis (IFA). In the first stage of the test, diluted samples of the patient's serum or dried blood are incubated in microchip reaction sites (blocks) with immobilised proteins (antigens) from food extracts. In the case of positive samples, antibodies

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specific to the food proteins bind to the antigens. Bounded specific IgG antibodies are detected with fluorescence-labeled (fluorochrome) antibodies against human IgG (secondary antibody conjugate). The fluorochrome tag attached to the secondary antibodies emits 680 nm light when illuminated with a 635 nm light wave. Depending on the amount of antibodies in the samples, the resulting solutions of different intensities are evaluated using a laser microchip reader and measuring the median fluorescence intensity (MFI).

2 x 21

# 5. Composition of reagent kit

Components Quantity Antigen-coated microchip, ready for use 2 microchips with 21 reactions sites each Dilution buffer, ready for use 1 x 30 ml Washing solution. 10 × concentrated 1 x 50 ml Positive control of a standard sample (SSC), ready for 1 x 450 ul use Secondary antibody conjugate, ready for use 1 x 4 ml Protective seal 2 pc. Instructions for use 1 pc. Quality control data sheet 1 pc.

# 6. Additional materials and equipment not included

- Glass containers for washing (2x tubs and stand);
- A thin magnet;
- Magnetic stirrer;
- A microgrid laser scanner capable of scanning at 635 nm;
- Automatic pipettes 20µl, 200µl and 1000µl;
- Pipette tips;
- Distilled or deionised water;
- Temperature-controlled incubator (37 °C);
- Timer;
- Dryer centrifuge;
- Multi-channel automatic pipette recommended;
- Incubator or water bath (recommended for warming the wash buffer).

# 7. Storage and stability

The kit must be stored at 2-8 °C. Important! Do not freeze the set!

In an unopened kit, all test reagents are stable and suitable for use until the expiry date marked on the packaging.

If, after opening, the reagents are stored at 2-8 °C and tightly sealed, they will remain stable and valid until the date indicated on the packaging, unless otherwise stated in the instructions for use below.

# 8. Warnings and precautions

- The product must only be used by trained clinical research laboratory staff.
- If the packaged reagents are obviously damaged, do not use the kit.
- Please read the instructions carefully before using the product. Only use the version of the instruction manual that comes with the product in the kit.
- The test must follow the instructions in the instructions for use.
- Do not substitute or mix reagents from this kit with reagents from other manufacturers.



- Follow Good Laboratory Practice (GLP) and safe working requirements. Some reagents contain preservatives at undeclared concentrations.
- Avoid contact of samples and reagents with eyes and skin. In case of contact with eyes or skin, rinse well with water. Replace or wash contaminated clothing. In case of ingestion, seek medical attention immediately.
- A positive control for a standard sample (SSC) is a biological sample of human origin. Appropriate safety precautions are recommended when working with these controls, as with blood samples.

# 9. Sample preparation and stability

Human blood serum is diluted 1:50 with dilution solution. For example, 3  $\mu l$  of sample is diluted with 147  $\mu l$  of dilution solution.

If a dry blood sample is used, add 650  $\mu$ l of the prepared dilution buffer to each well of a 96-well plate (2 ml well capacity), place the plate in the stand and insert the sponge (1 sponge per well). The sponges are incubated for 1 hour using a shaker at 500 rpm. After incubation, the dry blood samples are ready for testing.

Store samples at 2-8 °C for up to 14 days. Dilution and use on the day of the test is recommended.

# 10. Preparation and stability of reagents, equipment

**Note:** All reagents must be removed and stored at room temperature (20-25  $^{\circ}$ C) for 30 min before use. Set the incubator for incubation of the microchips at 37  $^{\circ}$ C.

• Washing solution. The washing solution is 10× concentrated. If crystallisation is visually apparent in the wash solution bottle, the bottle should be heated to 30 - 35 °C (until the crystals have dissolved) and mixed thoroughly before dilutions are made. Dilute the concentrate 1:10 with distilled water (dH<sub>2</sub>O) (e.g. add 50 ml of wash buffer concentrate to 450 ml dH<sub>2</sub>O). **Note:** The ready-to-use wash solution remains stable for 4 weeks at 2-8 °C.

• **Secondary antibody conjugate.** Ready to use. Mix reagents well before use. It is necessary to close the vial immediately after use - the reagent is sensitive to light.

• The microchip coated with antigens. Ready to use. Before opening the protective packaging of the microchip, the microchip must be stored at room temperature for 20 minutes to prevent moisture (condensation) from forming.

• **Positive control of a standard sample (SSC),** ready for use. Mix well before use and leave at room temperature for at least 15 minutes.

• Dilution buffer. Ready to use.

# 11. Waste management

Patient samples, control materials, reagents, microchips and waste generated must be managed as potential sources of infection. All reagents must be disposed of in accordance with local laboratory waste management regulations and guidelines.

# 12. Quality control and calibration

The MFI values measured on the standard sample positive control (SSC) shall be consistent with the parameters given in the quality control data sheet for that batch of kits for each test run. A quality control certificate together with the specified quality control parameters shall be included in each kit. If the test controls do not comply with the specified parameters, the test result shall be considered as inaccurate and a repeat test shall be recommended.



The sensitivity classes are based on the first batch experiment carried out by the manufacturers, in which a calibration curve for the whole batch is generated using a standard human IgG serum from WHO ( $1^{sr}$  67/086). Based on the WHO serum titre and the MFI, 4 classes defining the range of antibody levels are generated. The standard curve is obtained by incubating the standard PSO IgG serum at different dilutions (according to IgG antibody concentrations) in the 9 fields of the microarray. The curve is constructed by plotting the MFI values measured in these wells with different antibody concentrations. The kit is accompanied by a test standard sample control (SSC) which is used in each experiment (in the 10 and 12 microgrid fields). The SMC is a measure of the performance and reliability of the test. The SMC is used as a positive control of the test and provides confirmation that the test has been performed correctly. It is mandatory for every test.

13. The procedure

#### 1 step

# 13.1. Incubation with a test sample (serum or eluted dried blood sample)

Add 100  $\mu$ l the prepared samples, the standard positive control (SSC) and the background control (dilution buffer) into the microchip wells:

An example of a microchip filling scheme, for a test of 18 samples in one replicate, is given in the table.

	1	2	3
А	S1	S2	S3
В	S4	S5	S6
С	S7	S8	S9
D	SSC	FK	SSC
Е	S10	S11	S12
F	S13	S14	S15
G	S16	S17	S18

**Description of the scheme**: 18 samples (S1-S18) are analysed (S18-M18 samples). Background control (only dilution buffer added to the well).

After the samples have been added, the microchip with the frame is placed in a temperature-controlled incubator and **incubated for 1 hour 37 °C.** 

**Important!** It is best to test when 18 samples have been collected, otherwise there will be unused fields and you cannot test the same microchip for a second time.

# Washing

After the initial incubation with samples, the contents of the wells are removed. The contents of the microchip wells shall be shaken out during manual washing and sucked out during washing with an automatic device. The microwell **shall be washed 5 times** in **5** instantaneous washes (5 wash cycles) with **100**  $\mu$ l of the prepared wash solution in each well.



After washing, the residual solution is removed from the microchip wells by inverting and drying with a disposable paper towel by gently shaking and beating on the surface.

#### Step 2

#### 13.2. Incubation with secondary antibody conjugate

The wells of the microchip are filled with **90**  $\mu$ **I** of the prepared secondary antibody conjugate. The microchip with frame is placed in the incubator and incubated for **30 minutes at 37** °C.

#### 13.3. Washing

After incubation with the conjugate, the contents of the wells are removed. The contents of the microchip wells are shaken out during manual washing and sucked out during washing with an automatic device. Wash the microchip 5 times in 5 instantaneous washes (5 wash cycles) with 100  $\mu$ l of the prepared wash solution in each well.

After washing, the residual solution is removed from the microchip wells by inverting and drying with a disposable paper towel by gently shaking and beating on the surface.

#### Step 3

#### 13.4. Final washes

The microchip shall be removed from the frame and transferred to a glass stand. Add 200 ml of washing solution to the glass bath, insert the magnet and immerse the glass stand with the microchip in the bath. The glass bath with the stand and the microchip is transferred to the magnetic stirrer. The washing is carried out for **10 minutes** with the **magnetic stirrer** set at a **division of 1,5**.

# 13.5. Washing with dH<sub>2</sub>O

200 ml of dH<sub>2</sub>O is added to a clean glass bath, a magnet is inserted and the glass stand and microchip are transferred from the glass bath with the washing solution to the glass bath with the dH<sub>2</sub>O. The glass bath with the stand and the microchip are transferred to the magnetic stirrer. Washing is carried out for **30 seconds.** After washing, the glass stand with the microchip is removed and placed on a napkin.

#### 13.6. Drying

The microchip is removed from the rack and placed in the centrifuge. The process is carried out **for 10 seconds.** The glass surface should be clean and dry when the protective cover of the dryer is opened.

# 13.7. Signal measurement

The microchip is inserted into a laser spectrophotometer and the median fluorescence intensities (MFI) are read **at 635 nm**. Primary IgG antibodies from the patient's sample are attached to secondary antibodies with a fluorochrome label which, when excited at 635 nm, emits a red light signal. After selecting the appropriate grid, the command "find all automatically" shall be pressed. The lab worker has to check that all points are nicely covered by the grid and then the command - **quantification process** is pressed. The results are saved in a ".txt" file format and are used to generate the patient response data.



# 14. Evaluation of results

The parameters in the quality control data sheet must be taken into account when assessing the results. If the results obtained from the SSC samples are in accordance with the quality control MFI values set by the manufacturer, the evaluation of the results shall continue. In case of deviations from the specified limits (too low or too high background control signals, quality points not within the specified limits, etc.) the test must be repeated. In case of recurrent test inaccuracies and if the test does not meet the control parameters even after repetition, please contact the manufacturer.

The standard curve used to calculate the concentrations and classes of IgG antibodies against different food proteins is provided by the manufacturer and does not need to be drawn up yourself. The standard curve is the dependence of the MFI on the antibody concentration in the calibrator in relative units per millilitre ( $\mu$ g/mI).

#### Interpretation of results:

if  $\mu$ g/ml  $\geq$  40, a strong positive result. Strong immune response. High concentration of IgG antibodies found.

if µg/ml 20 - 40 - positive. Average immune response. Average IgG antibody concentration found.

if µg/ml 10 - 20 - positive. Increased immune response. Elevated IgG antibody levels found.

If µg/ml < 10, the result is negative. No immune response detected. No IgG detected.

#### Measuring results in standardised units:

The results obtained in  $\mu$ g/ml units correspond to the U/ml and  $\mu$ g/ml units in the First WHO International Standard for IgG (67/086). This means that the antibody concentration measured by the

test is, for example, 814.7 μg/ml = 1 IU/ml. IU/ml - international units per millilitre

#### 15. Clinical description of the test

#### Correlation of test results with other commercial tests

The performance of the FI Scan 220 test is further evaluated against commercial tests from other manufacturers. A satisfactory correlation of results (82%) has been found using the manufacturer's biobank samples and compared with other commercial food intolerance tests. This correlation was found for 22 recurrent analytes in both comparative tests. It is important to mention that non-standardised food protein extracts are used in the food intolerance testing market. Also, each manufacturer may continuously change the classification of the results according to different IgG antibody concentrations. It is for these reasons that it is not recommended to compare the results of tests from different manufacturers as they may differ significantly.

# **Repeatability of test results**

The results of replicates on the same microarray (in different fields) may differ by up to 1 class. The MFI values of the analytes (food protein extracts) (within the manufacturer's positive class limits) may vary by 10-20 %.



# Reproducibility (repeatability) of test results

Sample reproducibility results may vary by 1-2 classes of magnitude between microarrays (different fields). For analytes (food protein extracts), MFI values (within the manufacturer's positive class limits) may vary by 15-25 %.

# **Microchip stability**

Unwrapped microchips are stable until the expiry date of the kit. If the package of microchips is opened, the microchips are stable for 30 days from the date of opening (unless the expiry date on the package is shorter, in which case the expiry date on the package should be used).

# 16. Restrictions on the procedure

• The result of a serological test should always be interpreted in conjunction with the patient's clinical symptoms and the results of other tests. For example, a negative test result does not exclude the presence of IgG antibodies.

• Proper collection and storage of samples is essential for test results.

• Validation of the test was carried out for the detection of IgG in human serum using a dry blood sample from blood-absorbing sponges.

• The efficiency of antibody binding is temperature dependent. Therefore, it is recommended to use an adjustable thermostat during the incubation steps. The effect of temperature on the controls is the same, so the resulting changes are largely compensated for in the calculation of the result. If the laboratory does not have a thermostat or if the thermostat is defective and testing is to be carried out, a shaker can be used for the incubations and the incubations can be carried out at a shaker speed of 350 rpm. In this case, the responsibility for variations and deviations in the results rests with the laboratory performing the test. The incubation times must not be changed.

• Insufficient washing can increase the MFI values of the analytes in the test sample and the background MFI signal of all analytes.

• The residual washing liquid in the wells when pouring the secondary antibody conjugate can lead to falsely low MFI values for the test.

Extracts	Extracts in Latin	Group
Adzuki bean (Red bean)	Vigna angularis	Legumes
Allspice	Pimenta dioica	Spice
Almond	Prunus amygdalus	Nuts & seeds
Aloe vera	Aloe vera	Vegetable
Amaranth	Amaranthus caudatus	Grain
Anchovy	Engraulis encrasicolus	Fish
Aniseed	Pimpinella anisum	Spice
Apple	Malus domestica	Fruit
Apricot	Prunus armeniaca	Fruit
Artichoke	Cynara cardunculus	Vegetable
Asparagus	Asparagus officinalis	Vegetable
Avocado	Persea americana	Vegetable
Banana	Musa x paradisiaca	Fruit
Barley	Hordeum vulgare	Grain
Bay boletus	Xerocomus badius	Mushroom
Bay leaf	Laurus nobilis	Spice
Beef	Bos primigenius f. taurus	Meat
Beet root	Beta vulgaris var. conditiva	Vegetable
Blackberry	Rubus fruticosus	Berry
Black-eyed pea	Vigna inguiculata	Legumes
Blue cheese	Bos primigenius f. taurus	Dairy product
Blue mussels	Mytilus edulis	Seafood

#### ANNEX 1. Test analytes.



Blueberry	Vaccinium myrtillus	Berry
Boar. wild	Sus scrofa	Meat
Brazil nut	Bertholletia excelsa	Nuts & seeds
Broad bean	Vicia faba	Legumes
Broccoli	Green sprouting broccoli	Vegetable
Brussels sprouts	Brassica oleracea var. Gemmifera	Vegetable
Buckwheat	Fagopyrum esculentum	Grain
Buttermilk	Bos primiaenius f. taurus	Dairy product
Button mushroom	Agaricus bisporus	Mushroom
Cabbage, red	Brassica oleracea capitata	Vegetable
Cacao	Theobroma cacao	Other
Cane sugar	Saccharum officinarum	Other
Cannabis	Cannabis sativa	Nuts & seeds
Cape gooseberry	Physalis peruviana	Berry
Capers	Capparis spinosa	Other
Carambole	Averrhoa carambola	Fruit
Caraway	Carum carv	Spice
Cardamom	Elettaria cardamomum	Spice
Carp	Cyprinus carpio	Fish
Carrots	Daucus carota	Vegetable
Caseine	Bos primigenius f. taurus	Dairy product
Cashew kernels	Anacardium occidentale	Nuts & seeds
Catfish, European	Silurus alanis	Fish
Cauliflower	Brassica oleracea var. bortrytis	Vegetable
Cayenne Pepper	Capsicum frutescens	Spice
Celeriac. knob	Apium graveolens	Vegetable
Chard. beet greens	Beta vulgaris ssp. vulgaris var. vulgaris	Vegetable
Cheese, cheddar type	Bos primigenius f. taurus	Dairy product
Cheese. Gouda	Bos primigenius f. taurus	Dairy product
Cherry	Prunus avium	Berry
Chicken (meat)	Gallus gallus domesticus	Meat
Chicken egg-white	Gallus gallus domesticus	Other
Chicken yolk	Gallus gallus domesticus	Other
Chickpeas	Cicer arietinum	Legumes
Chicory	Cichorium intybus var. Foliosum	Spice
Chinese cabbage	Brassica oleracea var capitata	Vegetable
Cinnamon	Cinnamomum verum	Spice
Clam	Chlamys varia	Seafood
Clove	Syzygium aromaticum	Spice
Coconut	Cocos nucifera	Fruit
Cocos milk	Cocos nucifera	Other
Cod. codling	Gadus morhua	Fish
Coffee	Coffea arabica	Other
Coriander	Coriandrum sativum	Spice
Lingonberry	Vaccinium vitis-idaea	Berry
Crayfish	Astacus astacus	Fish
Cucumber	Cucumis sativus	Vegetable
Curd cheese	Bos primigenius f. taurus	Dairy product
Curry	-	Spice
Dandelion	Taraxacum vulgare	Other
Date	Phoenix dactylifera	Fruit
Deer	Capreolus capreolus	Meat
Dill	Anethum graveolens	Spice
Duck	Anas platyrhynchos domestica	Meat
Duck egg	Anas platyrhynchos domestica	Other
Durum wheat	Triticum durum	Grain
Eel	Anguilla anguilla	Fish
Egg Plant	Solanum melongena	Vegetable
Elk meat	Alces alces	Meat
Endive	Cichorium endiva	Vegetable
Fig	Ficus carica	Fruit
Flax. linseed	Linum usitatissimum	Grain
Garlic	Allium sativum	Spice
Gelatin	Sus scrofa f. domestica	Other



Ginger	Zingiber officinale	Spice
Gluten	Triticum aestivum	Other
Goat milk and cheese	Capra hircus	Dairy product
Goose	Anser anser domesticus	Meat
Grape	Vitis vinifera	Berry
Grapefruit	Citrus paradisi	Citrus fruit
Grapevine snail	Helix pomatia	Other
Grass pea	Lathyrus sativus	Legumes
Green bean	Phaseolus vulgaris	Legumes
Green pea	Pisum sativum	Legumes
Guava	Psidium augiava	Fruit
Halibut	Hippoglossus hippoglossus	Fish
Hazelnut	Corvlus avellana	Nuts & seeds
Hen egg	Gallus aallus domesticus	Other
Herring	Clunea barenaus	Fish
Honeydew melon	Cucumis melo var Inodorus	Fruit
Hons	Humulus lunulus	Other
Hot paprika, spice	Cansisum annuum	Spice
Hot papintal spice	Lastus satius us. Canitata	Vegetable
Iceberg lettuce	Luciucu saliva var. Capitata	Vegetable
Juniper berry	Juniperus asnei	Berry
Kale. curied kale	Brassica oleracea var. Sabellica	Vegetable
Kamut	Triticum polonicum	Grain
Ketir	Bos primigenus f. taurus	Dairy product
Kiwi	Actinidia deliciosa	Fruit
Kohlrabi (turnip cabbage)	Brassica oleracea var. Gongylodes	Vegetable
Lamb	Ovis ammon f. aries, Ovis aries (Ovis spp.)	Meat
Lamb's lettuce (Corn salad)	Valerianella locusta	Vegetable
Leek	Allium porrum	Vegetable
Lemon	Citrus limon	Citrus fruit
Lemon balm	Melissa officinalis	Spice
Lentil	Lens culinaris	Legumes
Lettuce	Lactuca sativa	Vegetable
Lime	Citrus limon	Citrus fruit
Litchi	Litchi chinensis	Fruit
Lobster	Homarus gammarus	Seafood
Macademia nut	Macadamia ternifolia	Nuts & seeds
Mackerel	Scomber scombrus	Fish
Maize. sweet corn	Zea mays	Grain
Malt	Hordeum vulgare	Grain
Mandarine	Citrus reticulata	Citrus fruit
Mango	Manaifera indica	Fruit
Maple syrup	Acer saccharum	Other
Milk protein	Bos primigenius f. taurus	Dairy product
Milk unboiled	Bos primigenius f taurus	Dairy product
Millet	Panicum miliaceum	Grain
Mozzarella	Bubalus arnee	Dairy product
Mung bean green gram	Viana radiata	Legumes
Mushroom Shitake	Lentinula edodes	Mushroom
Mustard seed	Singnis alba	Spice
Mutton	Ouis gries	Meat
Nettle	Unities dialog	Othor
Nettie		Carrie
Oats	Avena sativa	Grafi
Olive black		Searood
	Olea europaea	Other
Olive. green	Olea europaea	Other
Union	Allium cepa	vegetable
Urange	Citrus sinensis	Citrus fruit
Oregano	Origanum vulgare	Spice
Oyster mushrooms	Pleurotus ostreatus	Mushroom
Oysters	Ostrea edulis	Seafood
Рарауа	Carica papaya	Fruit
Parsley	Petroselinum crispum	Spice
Passion fruit	Passiflora edulis	Fruit
Peach	Prunus persica	Fruit
Peanut	Arachis hypogaea	Nuts & seeds



Pear	Pyrus communis	Fruit
Pertin	-	Other
Penner black	- Binor nigrum	Spico
Pepper, green	Piper nigrum	Spice
Pepper, green	Piper nigrum	Spice
Peppermint	Mentha piperita	Spice
Perch	Perca fluviatilis	Fish
Pine nut	Pinus pinea	Nuts & seeds
Pineapple	Ananas comosus	Fruit
Pistachio	Pistacia vera	Nuts & seeds
Plaice	Pleuronectes platessa	Fish
Plum	Prunus domestica	Fruit
Pollock	Theragra chalcogramma	Fish
Poppy seeds	Papaver somniferum	Nuts & seeds
Pork	Sus scrofa domestica	Meat
Potato	Solanum tuberosum	Vegetable
Pumpkin	Cucurbita pepo	Vegetable
Quinoa (Goosefoot)	Chenopodium auinoa	Grain
Babbit	Oryctolaaus cupiculus	Meat
Radish red and white	Ranhanus sativus	Vegetable
Paising	Vitis vinifera	Berny
Rano cood	Prassica papus	Nuts & coods
Rape seeu Paspherny	Rubus idagus	Berny
Raspuelty Rad kidnov boon	Rhaspolus vulgaris	Logumos
Red kidney bean	Priuseoius vuigaris	Legumes
Rice	Uryza sativa	Grain
Roquette	Eruca sativa	Vegetable
Rosemary	Rosmarinus officinalis	Spice
Rye	Secale cereale	Grain
Salmon	Salmo salar	Fish
Sardine	Sardina pilchardus	Fish
Savoy cabbage	Brassica oleracea convar. capitata var. sabauda	Vegetable
Scallop	Pecten maximus	Seafood
Sea bass	Moronidae	Fish
Sea buckthorn juice	Hippophae rhamnoides	Berry
Sesame	Sesamum indicum	Grain
Shaddock	Citrus maxima	Citrus fruit
Sheen milk and cheese	Ovis aries (Ovis spn.)	Dairy product
Shripp, prawn	Pangeus monodon	Seafood
Soft cheese	Bos primiaenius f taurus	Dairy product
Sole	Solea solea	Fish
Soumilk	Chucino may	Othor
Soveheen	Chusine max	Logumos
Soya bean	Giycine max	Legumes
Speit	Triticum destivum ssp. Speita	Grain
Spinach	Spinace oleracea	Vegetable
Squid	Loligo spp.	Seatood
Strawberry	Fragaria vesca	Berry
Sugar beet		
Sugar melon	beta vulgaris	Vegetable
Sugar meren	beta vulgaris Cucumis melo var. cantalupensis	Vegetable Fruit
Sunflower seed	beta vulgaris Cucumis melo var. cantalupensis Helianthus annuus	Vegetable Fruit Nuts & seeds
Sunflower seed Sweet basil	beta vulgaris Cucumis melo var. cantalupensis Helianthus annuus Ocimum basilicum	Vegetable Fruit Nuts & seeds Spice
Sunflower seed Sweet basil Sweet chestnut	beta vulgaris Cucumis melo var. cantalupensis Helianthus annuus Ocimum basilicum Castanea sativa	Vegetable Fruit Nuts & seeds Spice Nuts & seeds
Sunflower seed Sweet basil Sweet chestnut Sweet pepper	beta vulgaris Cucumis melo var. cantalupensis Helianthus annuus Ocimum basilicum Castanea sativa Capsicum annuum	Vegetable Fruit Nuts & seeds Spice Nuts & seeds Vegetable
Sweet basil Sweet chestnut Sweet pepper Sweet potato	beta vulgaris Cucumis melo var. cantalupensis Helianthus annuus Ocimum basilicum Castanea sativa Capsicum annuum Ipomoea batatas	Vegetable Fruit Nuts & seeds Spice Nuts & seeds Vegetable Vegetable
Sweet basil Sweet chestnut Sweet pepper Sweet potato Tea. black	beta vulgaris Cucumis melo var. cantalupensis Helianthus annuus Ocimum basilicum Castanea sativa Capsicum annuum Ipomoea batatas Camella sinensis	Vegetable Fruit Nuts & seeds Spice Nuts & seeds Vegetable Vegetable Other
Sweet basil Sweet chestnut Sweet pepper Sweet potato Tea. black Thyme	beta vulgaris Cucumis melo var. cantalupensis Helianthus annuus Ocimum basilicum Castanea sativa Capsicum annuum Ipomoea batatas Camellia sinensis Thymus vulgaris	Vegetable Fruit Nuts & seeds Spice Nuts & seeds Vegetable Vegetable Other Spice
Sweet basil Sweet chestnut Sweet popper Sweet potato Tea. black Thyme Tofu	beta vulgaris Cucumis melo var. cantalupensis Helianthus annuus Ocimum basilicum Castanea sativa Capsicum annuum Ipomoea batatas Camellia sinensis Thymus vulgaris Glvcine max	Vegetable Fruit Nuts & seeds Spice Nuts & seeds Vegetable Vegetable Other Spice Other
Sunflower seed Sweet basil Sweet chestnut Sweet pepper Sweet potato Tea. black Thyme Tofu Tomato	beta vulgaris Cucumis melo var. cantalupensis Helianthus annuus Ocimum basilicum Castanea sativa Capsicum annuum Ipomoea batatas Camellia sinensis Thymus vulgaris Glycine max Uucopersicon esculentum	Vegetable Fruit Nuts & seeds Spice Nuts & seeds Vegetable Other Spice Other Vegetable
Sunflower seed Sweet basil Sweet chestnut Sweet pepper Sweet potato Tea. black Thyme Tofu Tomato Toninambur	beta vulgaris Cucumis melo var. cantalupensis Helianthus annuus Ocimum basilicum Castanea sativa Capsicum annuum Ipomoea batatas Camellia sinensis Thymus vulgaris Glycine max Lycopersicon esculentum Helianthus tuberasus	Vegetable Fruit Nuts & seeds Spice Nuts & seeds Vegetable Vegetable Other Spice Other Vegetable Vegetable
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Sunflower seed Sweet basil Sweet chestnut Sweet pepper Sweet potato Tea. black Thyme Tofu Jomato Topinambur Trout (rainbow trout) Turafich	beta vulgaris Cucumis melo var. cantalupensis Helianthus annuus Ocimum basilicum Castanea sativa Capsicum annuum Ipomoea batatas Camellia sinensis Thymus vulgaris Glycine max Lycopersicon esculentum Helianthus tuberosus Oncorhynchos mykiss Thymus elbacarac	Vegetable Fruit Nuts & seeds Spice Nuts & seeds Vegetable Other Spice Other Vegetable Vegetable Vegetable Vegetable Eich
Sunflower seed Sweet basil Sweet chestnut Sweet pepper Sweet potato Tea. black Thyme Tofu Tomato Topinambur Trout (rainbow trout) Tundfish	beta vulgaris Cucumis melo var. cantalupensis Helianthus annuus Ocimum basilicum Castanea sativa Capsicum annuum Ipomoea batatas Camellia sinensis Thymus vulgaris Glycine max Lycopersicon esculentum Helianthus tuberosus Oncorhynchos mykiss Thunnus albacares Mulgaris albacares	Vegetable Fruit Nuts & seeds Spice Nuts & seeds Vegetable Vegetable Other Spice Other Vegetable Vegetable Fish Fish
Sunflower seed Sweet basil Sweet chestnut Sweet pepper Sweet potato Tea. black Thyme Tofu Tomato Topinambur Trout (rainbow trout) Trunafish Turkey meat	beta vulgaris Cucumis melo var. cantalupensis Helianthus annuus Ocimum basilicum Castanea sativa Capsicum annuum Ipomoea batatas Camellia sinensis Thymus vulgaris Glycine max Lycopersicon esculentum Helianthus tuberosus Oncorhynchos mykiss Thunnus albacares Meleogris gallopavo	Vegetable Fruit Nuts & seeds Spice Nuts & seeds Vegetable Vegetable Other Spice Other Vegetable Vegetable Fish Fish Meat C.
Sunflower seed Sweet basil Sweet chestnut Sweet pepper Sweet potato Tea. black Thyme Tofu Tomato Topinambur Trout (rainbow trout) Tunafish Turkey meat Vanilla	beta vulgaris Cucumis melo var. cantalupensis Helianthus annuus Ocimum basilicum Castanea sativa Capsicum annuum Ipomee batatas Camellia sinensis Thymus vulgaris Glycine max Lycopersicon esculentum Helianthus tuberosus Oncorhynchos mykiss Thunnus albacares Meleagris gallopavo Vanilla planifolia	Vegetable Fruit Nuts & seeds Spice Vegetable Vegetable Other Spice Other Vegetable Vegetable Vegetable Fish Fish Meat Spice Spice
Sunflower seed Sweet basil Sweet chestnut Sweet poper Sweet potato Tea. black Thyme Tofu Topinambur Trout (rainbow trout) Trout (rainbow trout) Tunafish Turkey meat Vanilla Veal	beta vulgaris Cucumis melo var. cantalupensis Helianthus annuus Ocimum basilicum Castanea sativa Capsicum annuum Ipomoea batatas Camellia sinensis Thymus vulgaris Glycine max Lycopersicon esculentum Helianthus tuberosus Oncorhynchos mykiss Thunnus albacares Meleagris gallopavo Vanilla planifolia Bos primigenius f. taurus	Vegetable Fruit Nuts & seeds Spice Nuts & seeds Vegetable Other Spice Other Vegetable Vegetable Vegetable Fish Fish Meat Spice Meat
Sunflower seed Sweet basil Sweet chestnut Sweet pepper Sweet potato Tea. black Thyme Tofu Tomato Topinambur Trout (rainbow trout) Tunafish Turkey meat Vanilla Veal Vine leaves	beta vulgaris Cucumis melo var. cantalupensis Helianthus annuus Ocimum basilicum Castanea sativa Capsicum annuum Ipomoea batatas Camellia sinensis Thymus vulgaris Glycine max Lycopersicon esculentum Helianthus tuberosus Oncorhynchos mykiss Thunnus albacares Meleagris gallopavo Vanilla planifolia Bos primigenius f. taurus Vinis vitifera	Vegetable Fruit Nuts & seeds Spice Nuts & seeds Vegetable Vegetable Other Spice Other Vegetable Fish Fish Meat Spice Meat Vegetable



Watermelon	Citrullus lanatus	Fruit
Wheat	Triticum aestivum	Grain
White bean	Phaseolus vulgaris	Legumes
Yeast (beer. bread)	Saccharomyces cerevisiae	Other
Zucchini	Cucurbita pepo ssp. pepo convar. giromontiina	Vegetable



# LEGEND

IVD	In vitro diagnostic medical device	~~~	Date of manufacture
CE	The product complies with applicable European Union requirements	***	Manufacturer
LOT	Product manufacturing LOT number	REF	Catalogue number
2°C	Storage temperature	Ŕ	Biological hazards
><	Expiration date	*	Light-sensitive reagent
() I	Follow the instructions for use inside		

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