

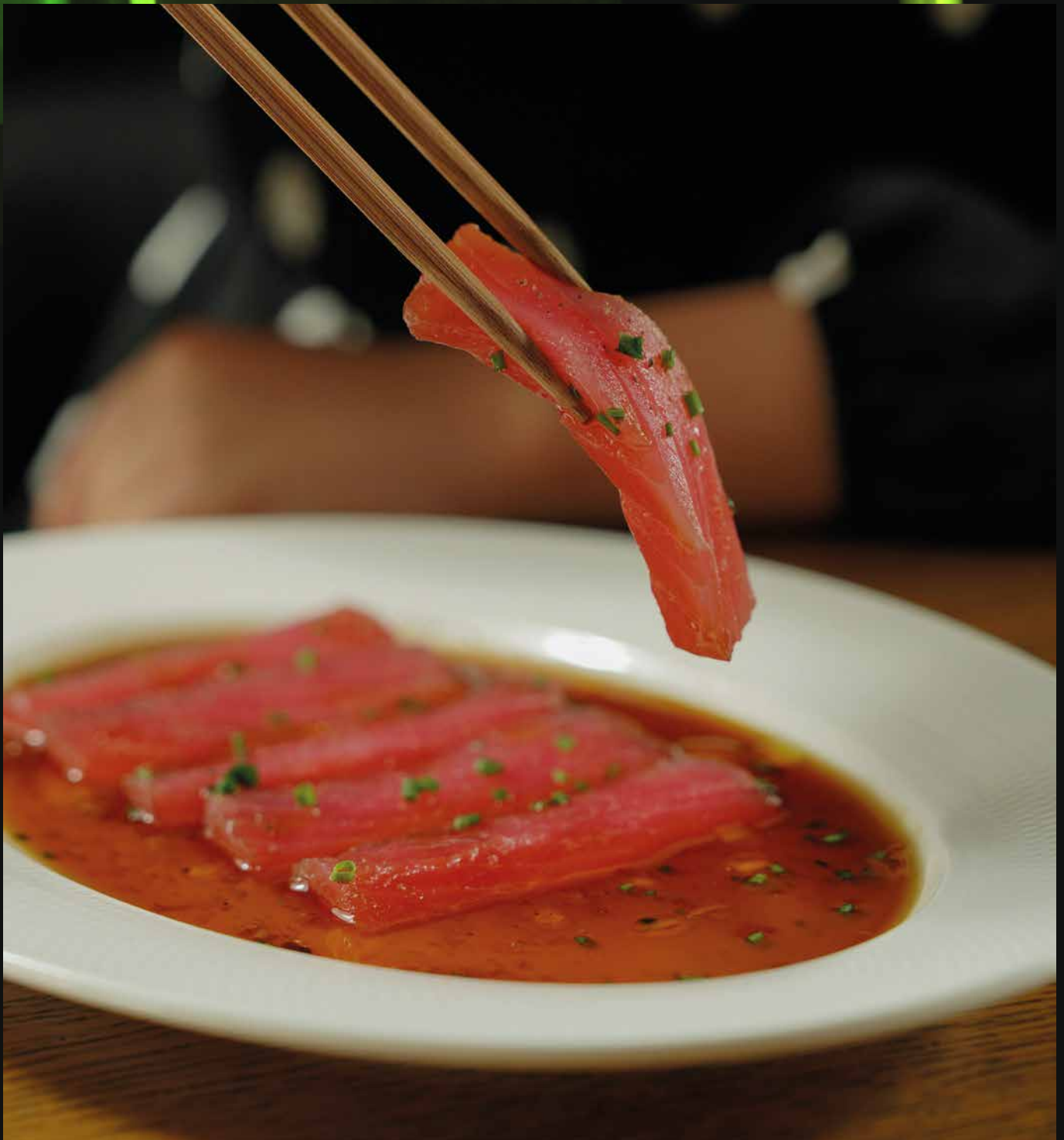
We make fish analysis easy

BioSystems
Y15

Y15, multiparametric analyser

Food & Beverage analysis

human - centred biotech





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We help you
ensure food quality
and safety

Analytical solutions

Since 2008, we offer solutions for food and beverage analysis in order to improve their quality and safety.

From discussions with industry and understanding sector needs, our professional team and technical colleagues help the experts of the food industry. We develop and validate analytical systems that are accurate and reliable to offer you an excellent user experience.

Finding the best solution at the same time we continuously improve together. Thus, we offer a personal assistance, giving you technical and scientific support in any moment.

At BioSystems, our main aim is to help our users and customers in their daily job monitoring food and beverages to make the right decisions during all the process.



**Technical &
scientific support**



**Remote
assistance**



**Customized
assessment**

Y15 system parameters

Histamine	12829
Histamine Spike Solution	12891
Sulfite	12845
Phosphate	12877
Ascorbic Acid	12828
Gluten	31000
Gluten Extraction Solution	31003
Gluten Spike Solution	31002

Would you also need
to analyse additives or
allergens in fish products?
Ask us!

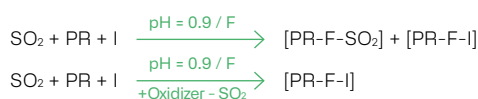


Sulfites

The reagent for sulfite assay in crustaceans allows highly sensitive analysis of this substance and avoids interference by using the **pararosaniline** method.

The analysis consists of a simple validated extraction in crustaceans and a rapid reaction with minimal reagent use. The kit includes the extraction buffer and calibrator, making it very easy to use compared with other methodologies, and shows excellent correlation with the official method (Monier-Williams).

Method	Two-reagent differential determination reading at 560 nm
Limit of linearity	500 mg/Kg
Limit of quantification	5.22 mg/Kg

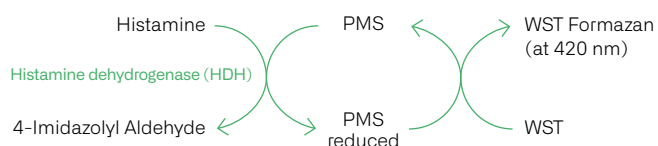


Histamine

The reagent specifically detects the presence of histamine in fish and fishery products with high sensitivity (**histamine dehydrogenase** method).

The analysis consists of a simple validated extraction and a rapid reaction with minimal reagent use. The system includes calibrators and is more economical and easier to use than expensive methodologies, such as immunoassay or HPLC.

Method	Two-reagent differential determination reading at 420 nm
Limit of linearity	200 mg/Kg
Limit of quantification	10 mg/Kg



Histamine kit for automated procedure, certified as AOAC Performance Tested MethodSM #072001.



Y15 system

Dimensions



Highlights

- 150 test/hour (75 sample/hour).
- Samples continuous loading.
- Dedicated reagents, minimum handling.
- Automatic pre and post dilutions.
- Low water consumption (0.5-1 L/h).
- User-friendly and adaptable software, direct results.

Item

Y15 analyser
Y15C analyser

Code

83106
83106C

Intended use: automated analyser for the measurement of analytes of interest in fish.

A compact analytical system with maximum robustness that adapts to your laboratory and different matrices.



Technical specifications

THROUGHPUTS

Speed	150 cycles/hour
Mean throughput	75 results/hour

SAMPLE HANDLING

Positions for racks (reagents or samples)	4 or 2 in Y15c
Rack samples capacity	24 samples position/rack
Max. capacity of samples	72 or 48 in Y15c
Barcode reader	External
Size of primary tubes	Ø 13 mm or 15 mm (max. height 100 mm)
Sample well diameter	13 mm
Sample types	ST1, ST2, ST3, ST4, ST5
Dispensing pump	Ceramic pump of high durability
Dispensing tip	Stainless steel 110 mm
Level detection	Capacitive
Sample pipetting volume	From 2 µL to 80 µL
Pipetting resolution	0.1 µL
Predilution ratio	From 1:2 to 1:40
Tip wash	Inside and outside

REAGENTS HANDLING

Volume of reagent bottles	20 mL, 50 mL
Reagents rack capacity	10 botellas de 20 o 50 mL
Cooled reagent	Yes, in Y15c. 20 reagents max.
Temperature range of cooler	10 °C below room temperature (at 25 °C)
Reagent volume	R1 volume, 10 µL to 550 µL R2 volume, 10 µL to 200 µL
Dispensing mode	Ceramic pump without maintenance
Pipetting resolution	1 µL
Tip wash	Inside and outside

REACTION ROTOR

Reaction volume range	From 180 µL to 800 µL
Number of wells	120
Well material	UV methacrylate
Type of incubation	Dry without maintenance
Temperature	37.0 °C
Temperature accuracy	±0.2 °C

OPTICAL SYSTEM

Light Source	Halogen lamp (6V, 10W)
Lightpath	6 mm
Wavelengths	340 - 405 - 420 - 520 - 560 - 600 - 620 - 635 - 670 nm (1 additional filter can be added by user)
Wavelength accuracy	±2 nm
Spectral range	340 - 900 nm
Photometric range	-0.05 to 3.0 A
Photometric detection system	Silicon photodiode
Internal resolution	<0.0001 A
Baseline stability	0.004 A max., 30 minutes at 505 nm

SIZE AND WEIGHT

Size (w., d., h.)	840 x 670 x 615 mm
Weight	45 Kg

ELECTRICAL AND ENVIRONMENTAL REQUIREMENTS

Mains voltage	115 to 230 V
Mains frequency	50 or 60 Hz
Electric power	500 VA
Ambient temperature	From 10 to 35 °C
Relative humidity	<75%
Altitude	<2500 m

FLUID REQUIREMENTS

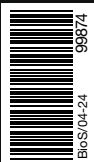
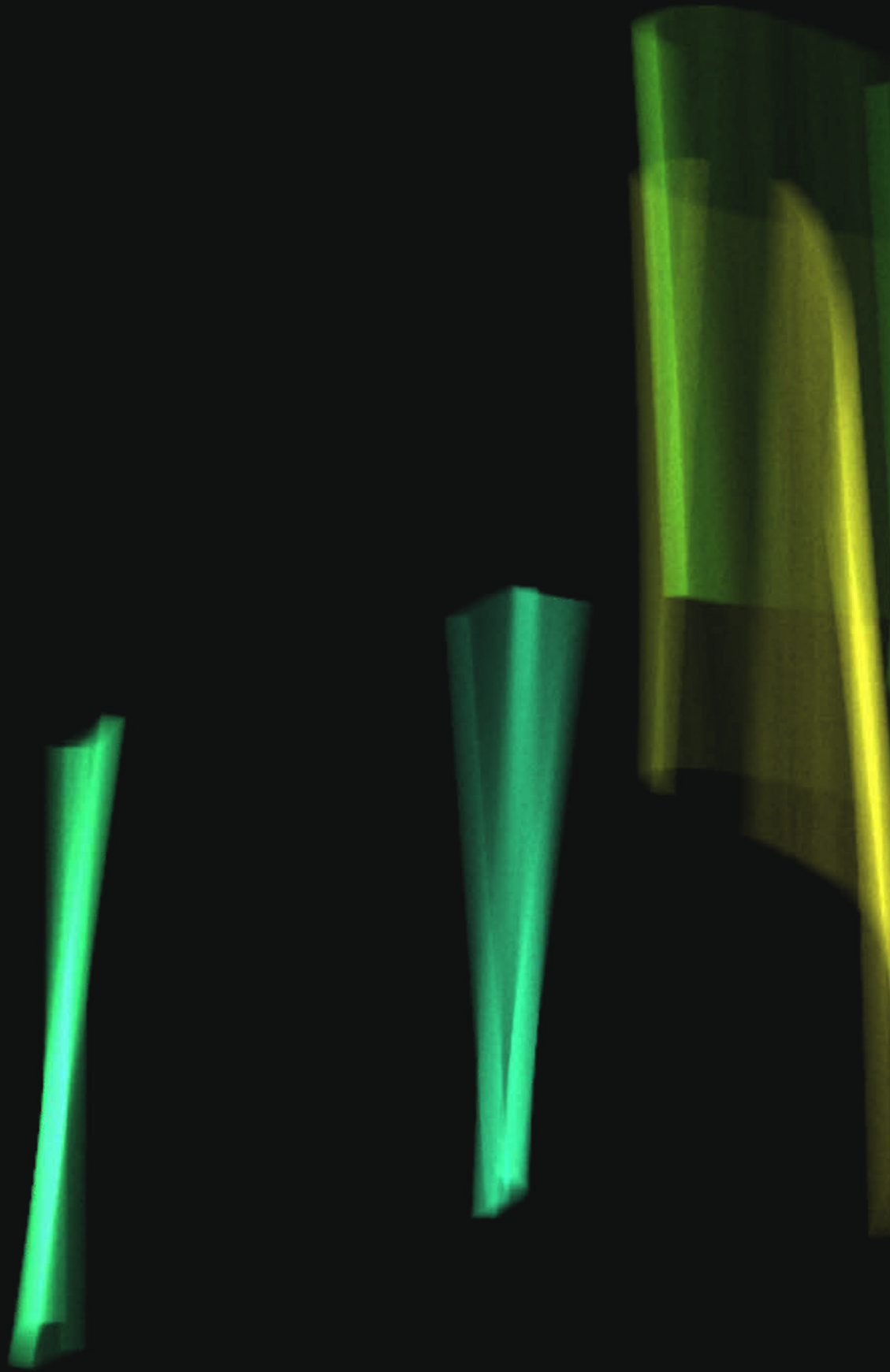
System liquid solution bottle	3 L
Washing solution bottle	3 L
Waste solution bottle	3 L

MINIMUM COMPUTER REQUIREMENTS

Operative system	Windows® 7 or Windows® 10 64 bit (x64)
CPU	Intel Core i3 @3.10 GHz or over
RAM	512 MB
Hard Disk	20 GB or over
Monitor minimum resolution	800x600
Connector of serial channel	USB

LABORATORY INFORM ON SYSTEMS (LIS)

Connectivity to LIS	Yes
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