

# Accuracy and effectiveness

Immunofluorescence Processor

BioSystems  
iPRO

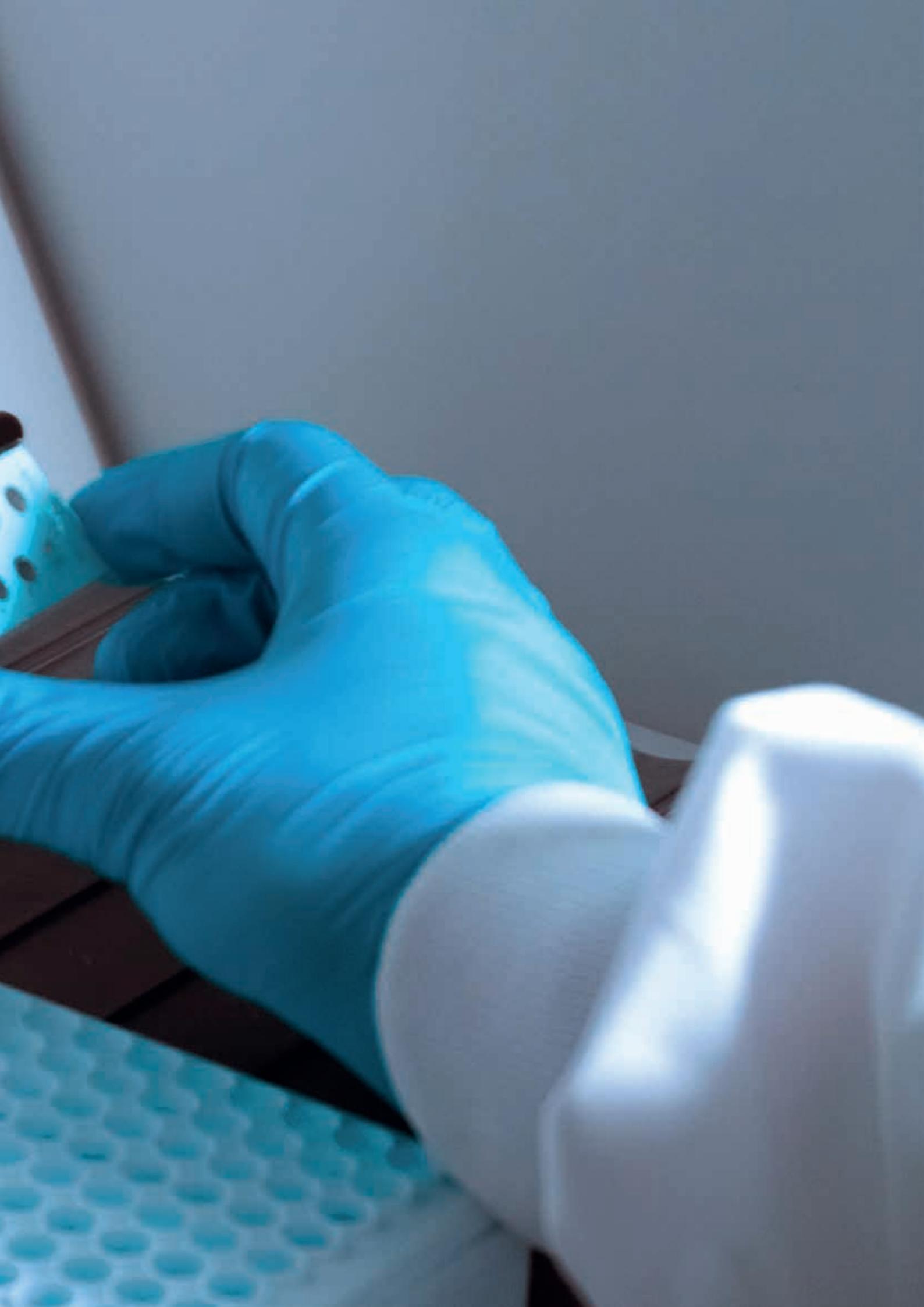
Clinical analysis - Autoimmunity

human - centred biotech



Improved to work more  
and better in less space.





# Making your lab bigger



## Smart your workflow

Save time for what is important by processing more samples in a single load and removing them after dilutions. The next generation iPRO is more autonomous than ever.



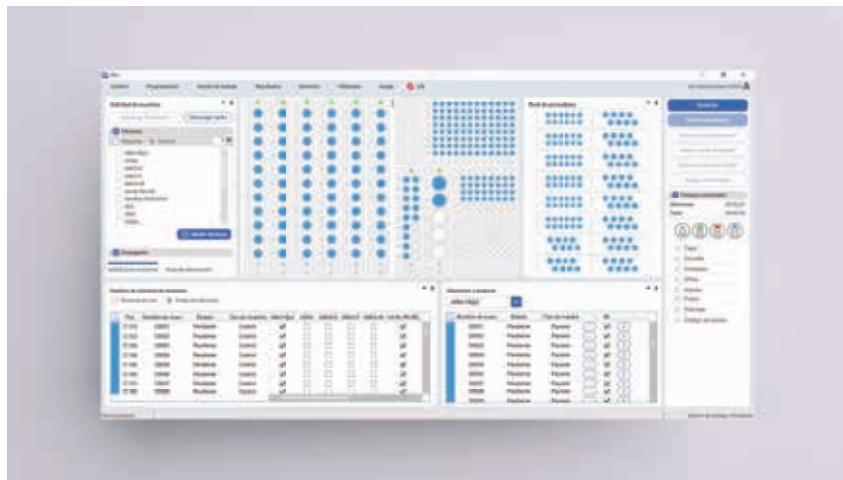
## Expanse your lab

Optimise your lab capacity with the new compact and cost-effective design. More functionalities in a smaller device.



## Trace your samples

Have an automated and complete register of the samples. Full traceability from start until the end of the procedure avoiding handling errors and speed up your work sessions.



## User co-designed software

Your feedback is decisive for us. Make your lab routine easier and faster by using our user co-developed software layout. All the IFA steps shown in a single screen.

# Technical Specifications

## Dimensions



## Highlights

- Adaptable racks to 3 sample tube types (13 mm x 75 mm, 15 mm x 100 mm or 2 mL).
- 2 dilution trays of 96 vials (1.1 mL).
- 2 slide plates (16 slides).
- Capacity for up to 10 reagents (15 mL), 18 controls (2 mL), 1 additional diluent.
- Reagents reservoirs: 1 L washing solution bottle, 3 L waste bottle, 3 L buffer bottle.
- Needle with conductimetric level detector.
- Slide washing flux system utilizing simultaneous dispensing and aspirating probes.
- On-board automatic barcode reader.
- On-board automatic DataMatrix reader.

| Item                          | Quantity   | Code    |
|-------------------------------|------------|---------|
| iPRO processor                | -          | 84101   |
| PBS (10x)                     | 100 mL     | 44592   |
| PBS (10x)                     | 500 mL     | 44962   |
| Concentrated washing solution | 100 mL     | BO13416 |
| iPRO dilution tubes (1.1 mL)  | 120 strips | AC14682 |

### Intended use:

Automated processor of immunofluorescence assays. For *in vitro* diagnostic professional use in the clinical laboratory only.



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**Volume and weight**

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|                                 |                    |
|---------------------------------|--------------------|
| Dimensions - lid closed (WxDxH) | 775 x 620 x 550 mm |
| Dimensions - lid open (WxDxH)   | 775 x 720 x 885 mm |
| Weight (net)                    | 83 Kg              |

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**Operating environment**

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|                   |                                 |
|-------------------|---------------------------------|
| Temperature       | 10 - 35 °C                      |
| Humidity          | < 75 %                          |
| Power requirement | 115 - 230 VAC, 50/60 Hz, 150 VA |

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**Processing**

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|                          |  |
|--------------------------|--|
| Traceability             | Linear barcode reader and DataMatrix reader                    |
| Sample capacity          | 66 samples   |
| Sample tubes             | Adaptable to 3 types   |
| Minimum sample volume    | 3 µL   |
| Minimun pipetting volume | 1 µL steps   |
| Control tubes            | 2 mL or 0.3 mL   |
| Control capacity         | 18 controls  |
| Reagents capacity        | 5 bottles (up to 10)   |
| Reagents volume          | 25 µL minimum by steps of 1 µL                                 |
| Diluent cuvettes         | 2 (192 vials of 1.2 mL)  |
| Needles                  | 2 (1 dispensation needle + 1 suction needle)                   |
| Slides capacity          | 16 slides  |
| Slide washing            | Flux system using simultaneously dispensing and suction probes |
| External tanks           | 3 L PBS, 1 L washing solution, 3 L waste                       |
| Liquid detection         | Level detection by conductivity                                |

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**Accuracy**

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|                        |               |
|------------------------|---------------|
| Precision and accuracy | < 1% at 3 µL  |
| Resolution             | 0.126 µL      |
| Dispensing rate        | Max. 880 µL/s |

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**Minimum PC requirements**

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|                    |                                     |
|--------------------|-------------------------------------|
| CPU                | Intel Core i3 @3.30 GHz or superior |
| Operating system   | Windows 10 64 bits (x64)            |
| Installed RAM      | 6 Gbytes                            |
| Display resolution | Monitor SVGA, 1280x800              |
| Connectivity       | USB                                 |

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**Certificates**

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|    |          |
|----|----------|
| CE | 98/79/CE |
|----|----------|

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# Reagents

| Code  | Quantity  | Description   |
|---|-----------|---|
| <b>ANTI-NUCLEAR ANTIBODIES HEp-2 (ANA-HEp-2)</b>          |           |   |
| 44546   | 10 slides | HEp-2 cells<br>Slide box, 6 wells                   |
| 44547   | 10 slides | Slide box, 12 wells                                 |
| <b>ANTI-nDNA ANTIBODIES (nDNA)</b>                        |           |   |
| 44820   | 10 slides | <i>Crithidia luciliae</i><br>Slide box, 6 wells     |
| 44819   | 10 slides | Slide box, 12 wells                                 |
| <b>ANTI-NEUTROPHIL CYTOPLASMIC ANTIBODIES (ANCA)</b>      |           |   |
| 44852   | 10 slides | Ethanol fixed ANCA<br>Slide box, 6 wells            |
| 44878   | 10 slides | Formalin fixed ANCA<br>Slide box, 6 wells           |
| <b>ANTI-ENDOMYSIUM ANTIBODIES (AEA)</b>                   |           |   |
| 44557   | 12 slides | Monkey Esophagus (Endomysium)<br>Slide box, 4 wells |
| 44710   | 12 slides | Slide box, 8 wells                                  |
| <b>AUTOANTIBODIES RL/RK/RS (ANA-AMA-ASMA-APCA-LKM)</b>    |           |   |
| 44570   | 12 slides | Rat Liver/Kidney/Stomach<br>Slide box, 4 wells      |
| 44639   | 12 slides | Slide box, 8 wells                                  |
| <b>AUTOANTIBODIES MsL/MsK/MsS (ANA-AMA-ASMA-APCA-LKM)</b> |           |   |
| 44826   | 12 slides | Mouse Liver/Kidney/Stomach<br>Slide box, 4 wells    |
| 44827   | 12 slides | Slide box, 8 wells                                  |
| <b>GLOMERULAR BASEMENT MEMBRANE ANTIBODIES (GBMA)</b>     |           |   |
| 44588   | 12 slides | Monkey Kidney<br>Slide box, 4 wells                 |
| <b>ANTI-ADRENAL CORTEX ANTIBODIES (AACA)</b>              |           |   |
| 44574   | 12 slides | Monkey Adrenal<br>Slide box, 4 wells                |
| <b>ANTI-STRIATED MUSCLE ANTIBODIES (ASTMA)</b>            |           |   |
| 44649   | 12 slides | Rat Striated Muscle<br>Slide box, 4 wells           |
| <b>ANTI-ISLET CELL ANTIBODIES (AICA)</b>                  |           |   |
| 44572   | 12 slides | Monkey Pancreas<br>Slide box, 4 wells               |

| Code                                 | Quantity  | Description                                     |
|--------------------------------------|-----------|---|
| <b>ANTI-THYROID ANTIBODIES (ATA)</b> |           |   |
| 44551                                | 12 slides | <b>Monkey Thyroid</b><br>Slide box, 4 wells     |
| <b>ANTI-SKIN ANTIBODIES (ASA)</b>    |           |   |
| 44561                                | 12 slides | <b>Monkey Esophagus</b><br>Slide box, 4 wells   |
| <b>ANTI-KERATIN ANTIBODIES (AKA)</b> |           |   |
| 44517                                | 12 slides | <b>Rat Esophagus</b><br>Slide box, 4 wells      |
| <b>AUTOANTIBODIES DUO</b>            |           |   |
| 44874                                | 60 tests  | <b>HEp-2/Monkey Liver</b><br>Slide box, 6 wells |

# Controls

| Code  | Quantity | Description  |
|-------|----------|--|
| 44696 | 0.3 mL   | Negative Control                                     |
| 44889 | 2.0 mL   | Negative Control                                     |
| 44502 | 0.3 mL   | Anti-Nuclear Antibodies-Homogeneous Positive Control |
| 44890 | 2.0 mL   | Anti-Nuclear Antibodies-Homogeneous Positive Control |
| 44585 | 0.3 mL   | Anti-Nuclear Antibodies-Centromere Positive Control  |
| 44504 | 0.3 mL   | Anti-Nuclear Antibodies-Nucleolar Positive Control   |
| 44503 | 0.3 mL   | Anti-Nuclear Antibodies-Speckled Positive Control    |
| 44549 | 0.3 mL   | Anti-Endomysium Antibodies IgA Positive Control      |
| 44893 | 2.0 mL   | Anti-Endomysium Antibodies IgA Positive Control      |
| 44732 | 0.3 mL   | Anti-Endomysium Antibodies IgG Positive Control      |
| 44512 | 0.3 mL   | Anti-Mitochondrial Antibodies Positive Control       |
| 44891 | 2.0 mL   | Anti-Mitochondrial Antibodies Positive Control       |
| 44522 | 0.3 mL   | Anti-Smooth Muscle Antibodies Positive Control       |
| 44892 | 2.0 mL   | Anti-Smooth Muscle Antibodies Positive Control       |
| 44553 | 0.3 mL   | Anti-Thyroid Antibodies Positive Control             |
| 44542 | 0.3 mL   | Anti-nDNA Antibodies Positive Control                |
| 44894 | 2.0 mL   | Anti-nDNA Antibodies Positive Control                |
| 44854 | 0.3 mL   | C-ANCA Positive Control                              |
| 44912 | 2.0 mL   | C-ANCA Positive Control                              |
| 44855 | 0.3 mL   | P-ANCA Positive Control                              |
| 44913 | 2.0 mL   | P-ANCA Positive Control                              |

# Conjugates

| Code  | Quantity | Description  |
|---|----------|--|
| <b>For Monkey tissues</b>                               |          |  |
| IgG FITC/Evans (M)<br>44882                             | 10 mL    | Anti-(Monkey adsorbed) IgG FITC conjugate, contains Evans Blue.<br>For use with GBMA, AICA, ATA, ASA and AACa.             |
| <b>IgG FITC/Evans (M) hs</b>                            |          |  |
| 44915   | 10 mL    | High sensitive Anti-(Monkey adsorbed) IgG FITC conjugate,<br>contains Evans Blue.<br>For use with AEA.                     |
| <b>IgA FITC/Evans</b>                                   |          |  |
| 44835   | 10 mL    | Anti-IgA FITC conjugate, contains Evans Blue.<br>For use with AEA.   |
| <b>For Rat and Mouse tissues</b>                        |          |  |
| FITC/Evans (R)<br>44836                                 | 10 mL    | Anti-(Rat adsorbed) IgG, IgA, IgM FITC Conjugate, contains<br>Evans Blue. For use with ANA, AMA, ASMA, APCA and LKM.       |
| <b>For HEp-2, nDNA, ANCA, and Rat and Mouse tissues</b> |          |  |
| IgG FITC/Evans<br>44834                                 | 10 mL    | Anti-IgG FITC conjugate, contains Evans Blue. For use with HEp-<br>2, nDNA, ANCA, ASMA, AKA, ANA, AMA, ASMA, APCA and LKM. |
| <b>Auxiliary Reagent</b>                                |          |  |
| <b>Miscellaneous</b>                                    |          |  |
| 44592   | 100 mL   | PBS (10x)  |
| 44962   | 500 mL   | PBS (10x)  |
| 44694   | 3 mL     | Mounting medium  |
| 44846   | 10 mL    | Glycin (for GBMA)  |
| 44897   | 100 u.   | Coverslips (24 x 60 mm)  |



**BioSystems S.A.**  
Costa Brava 30, 08030 Barcelona (Spain)  
t. +34 933 110 000  
[www.biosystems.global](http://www.biosystems.global)



Management System  
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