




INDICAL

***XIX.2 workshop* MRAMA. UAM, Bellaterra, 23 Nov 2021**

MÉTODOS RÁPIDOS Y AUTOMATIZACIÓN EN MICROBIOLOGÍA ALIMENTARIA



INDICAL
BIOSCIENCE

Hello, we are **INDICAL**.
(formerly QIAGEN Animal Health)

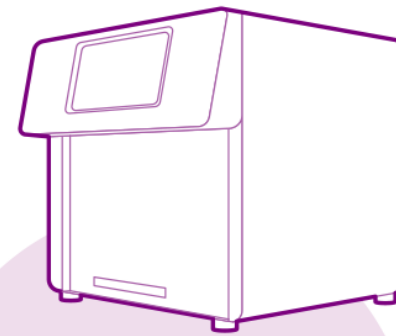
Indical Diagnostic Solutions

INDICAL
BIOSCIENCE



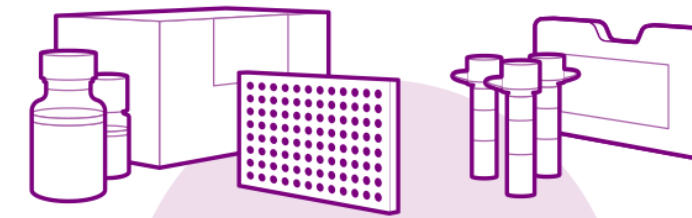
Sample preparation

Extraction kits and reagents for efficient isolation of nucleic acids from a variety of sample types.



Instruments

For high- to low-throughput testing



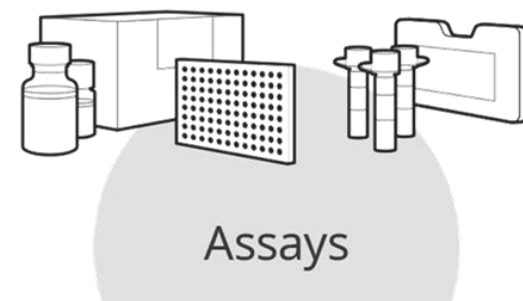
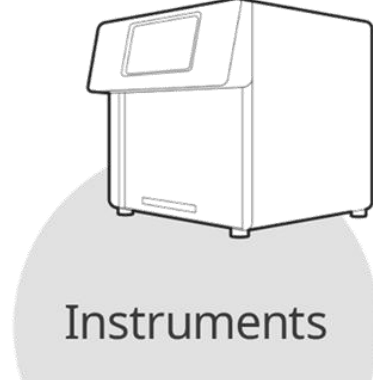
Assays

Ready-to-use, pathogen-specific PCR assays, reagents and ELISA kits



Analysis

Tools and technology for the reliable conversion of data to insight.



Cat. no.	Old Name (no. of rxn)	New Name (no. of rxn)
SP947257	MagAttract 96 cador Pathogen w/o Plastics (384)	IndiMag Pathogen Kit w/o plastics (384)
SP947457	MagAttract 96 cador Pathogen Kit (384)	IndiMag Pathogen Kit (384)
SP54106	QIAamp cador Pathogen Mini Kit (250)	IndiSpin Pathogen Kit (250)
SP54104	QIAamp cador Pathogen Mini Kit (50)	IndiSpin Pathogen Kit (50)
SP947757	MagAttract Mastitis Kit (384)	IndiMag Mastitis Kit (384)
SP69805	DNeasy Mastitis Mini Kit (192)	IndiSpin Mastits Kit (192)
SP54161	cador Pathogen 96 QIAcube HT Kit (480)	IndiSpin QIAcube HT Pathogen Kit (480)
SP947057	BioSprint 96 One-For-All Vet Kit (384)	
PW950067	QIAcube HT Plasticware (480)	

NEW NAME

IndiSpin Pathogen Kit

QIAamp cador Pathogen Mini Kit

OLD NAME

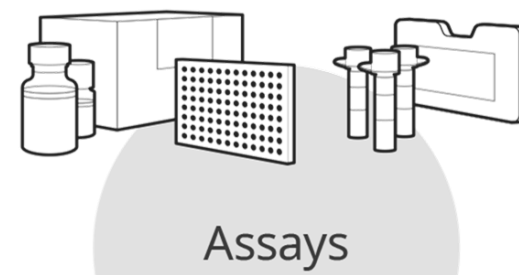
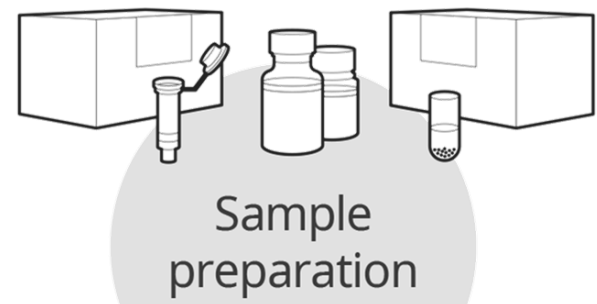


NEW NAME

IndiMag Pathogen Kit

MagAttract 96 cador Pathogen Kit

OLD NAME



IndiMag 48

- ✓ UV decontamination
- ✓ 30 min protocols
- ✓ Low amount of plastics (very low operating costs)
- ✓ Open software / easy to use and program
- ✓ 1 to 48 samples per run
- ✓ LxDxH: 37 x 42 x 39 cm



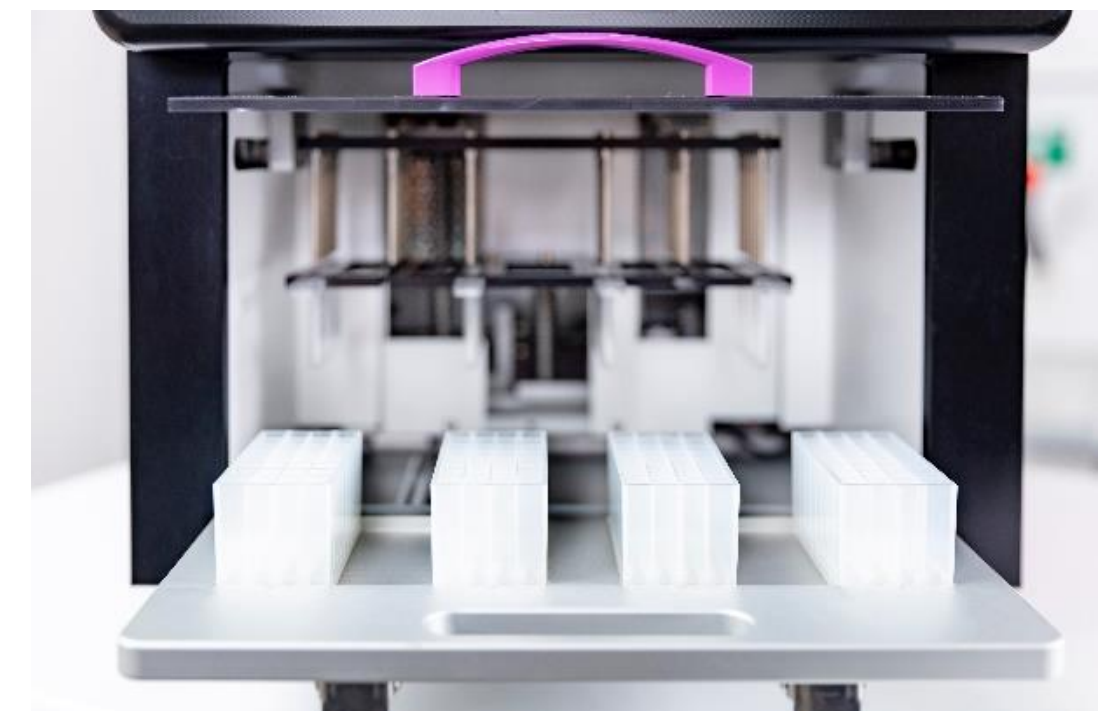
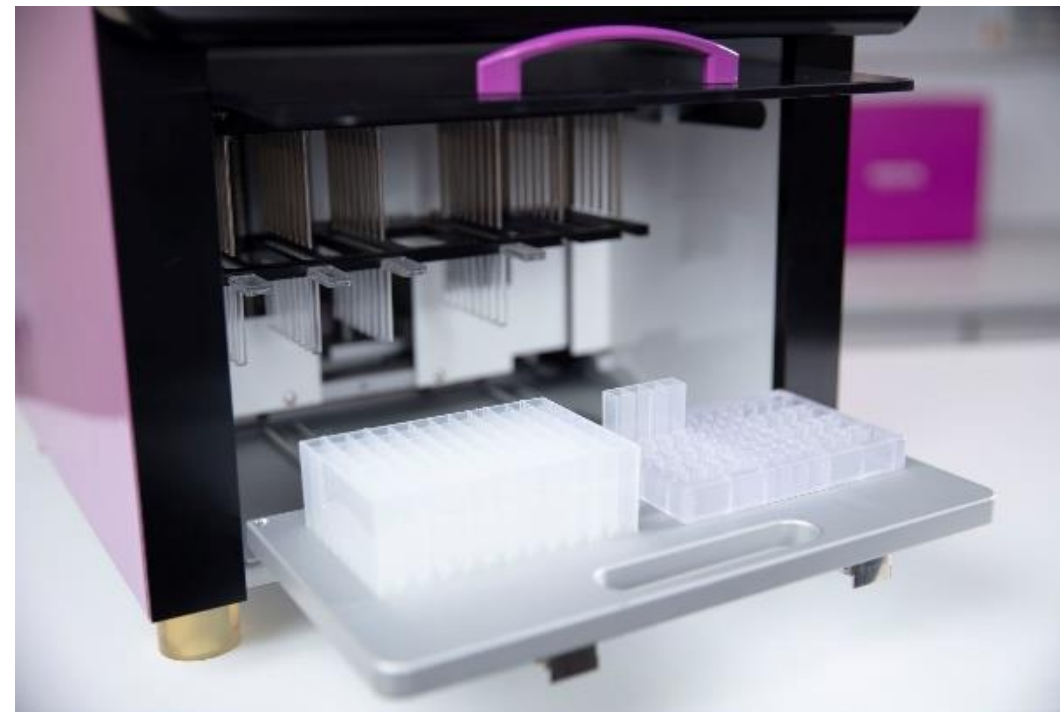
IndiMag 48 - Validation and Data

Flexible sample number acceptance

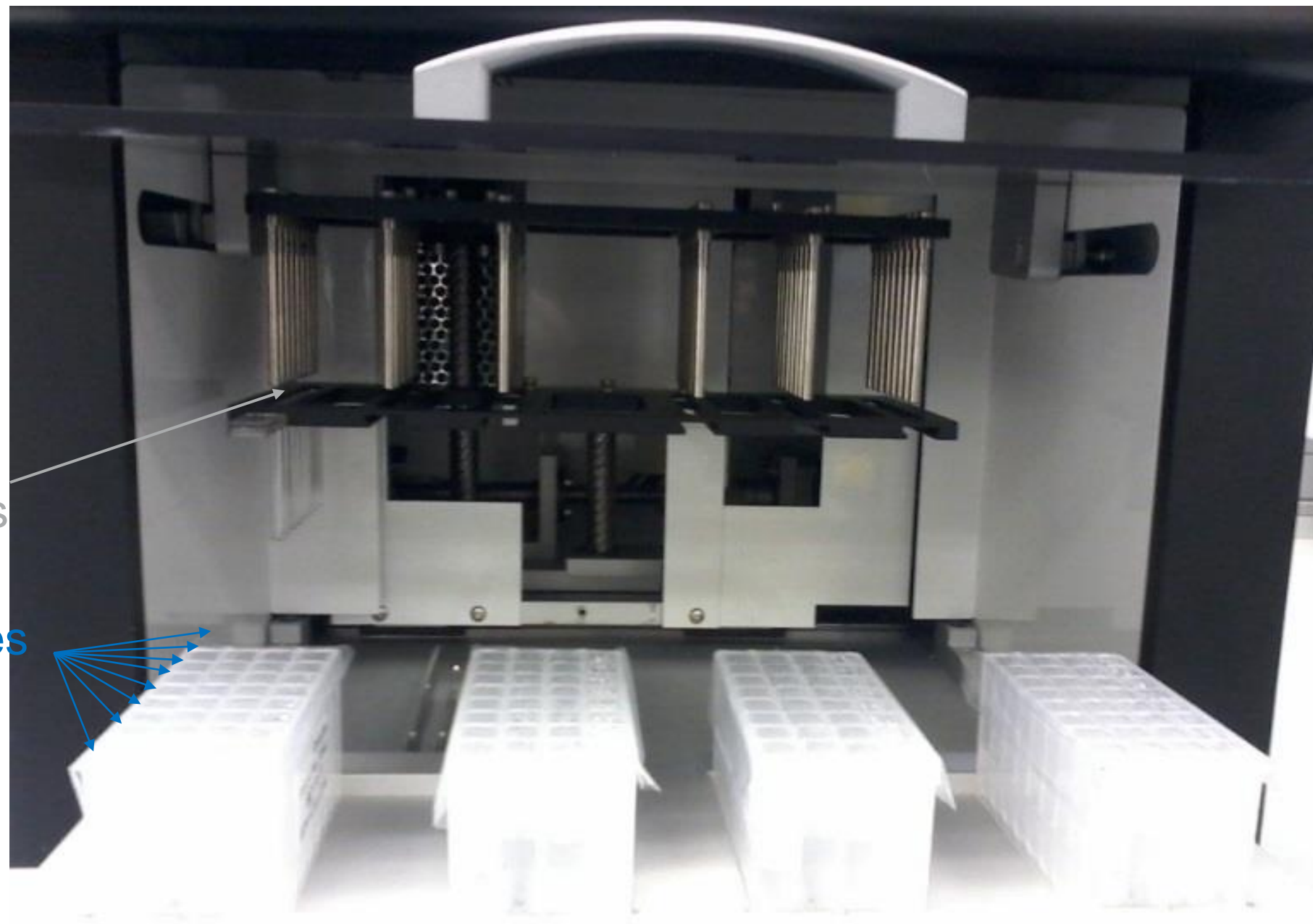


IndiMag 48 – Validation and Data

Flexible sample number acceptance



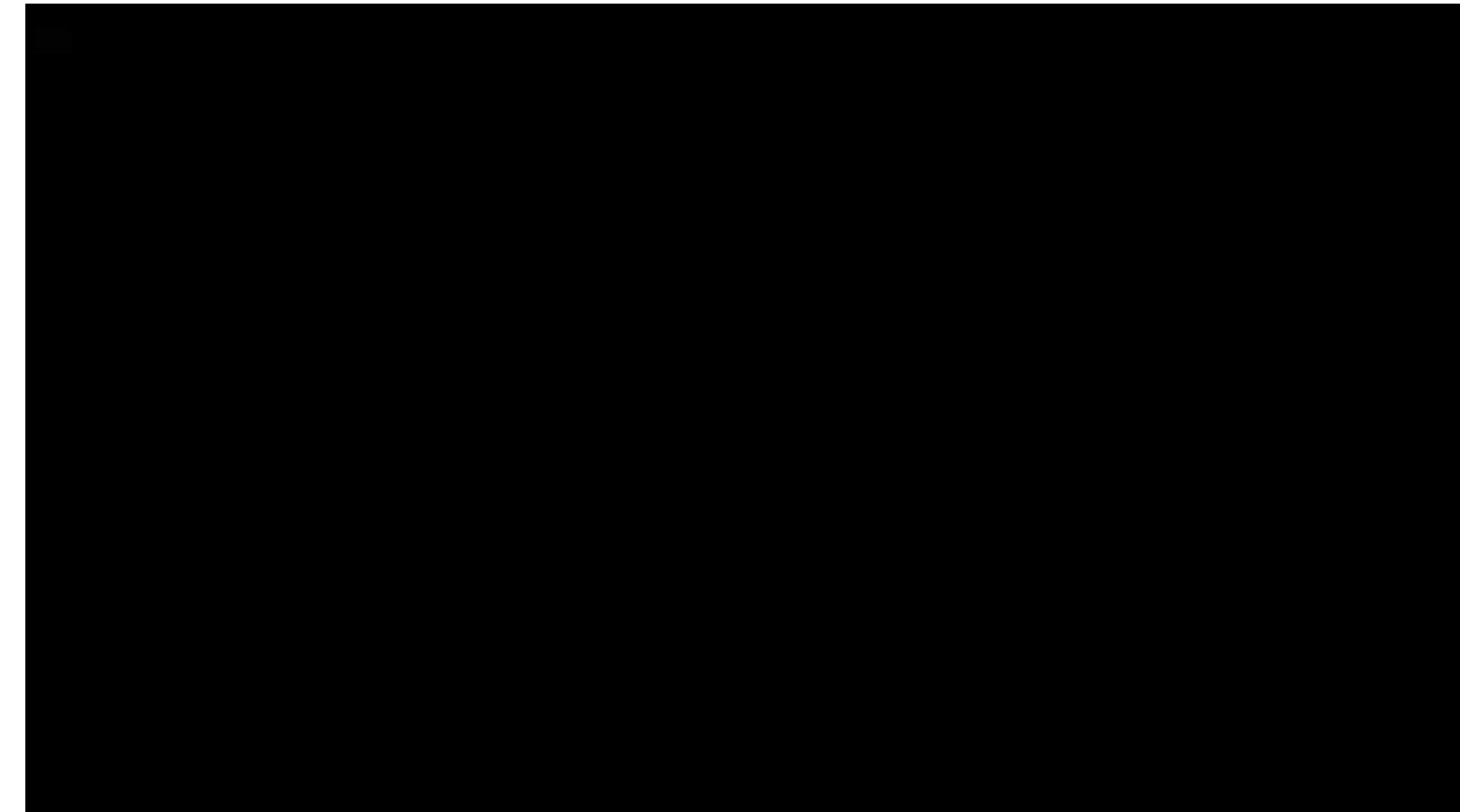
IndiMag 48 - Magnetic Bead based DNA and RNA extraction



Rod covers

Samples

Plastics Available: for 1 ; 8 and 24 samples



Flexible workbench working in rows of 8 samples.

Size: 364B x 420D x 386H mm ; 25kg

Features: UV light,
Flexible software,
7" touch screen

Plastics: 96 well or 32 well or 4 well-blocks available
Rod covers (1 per 8 samples),

Capacity: Min: 1 sample
Max: 48 samples
(possible to combine 96 and 32-well blocks)

Always easier: prefilled cartridges

Available in 8-samples and 24-samples formats



Always easier: prefilled cartridges

In 8-samples and 24-samples formats



EasyLab

1. Centrifuge briefly the plate to ensure all liquids are at the bottom
2. Remove the aluminum foil
3. Pipette your samples (on top of the prefilled PK)
4. Add the Lysis buffer on top of your samples
5. Place plate and rod cover in the IndiMag 48 instrument and press Start!

Always easier: prefilled cartridges

In 8-samples and 24-samples formats

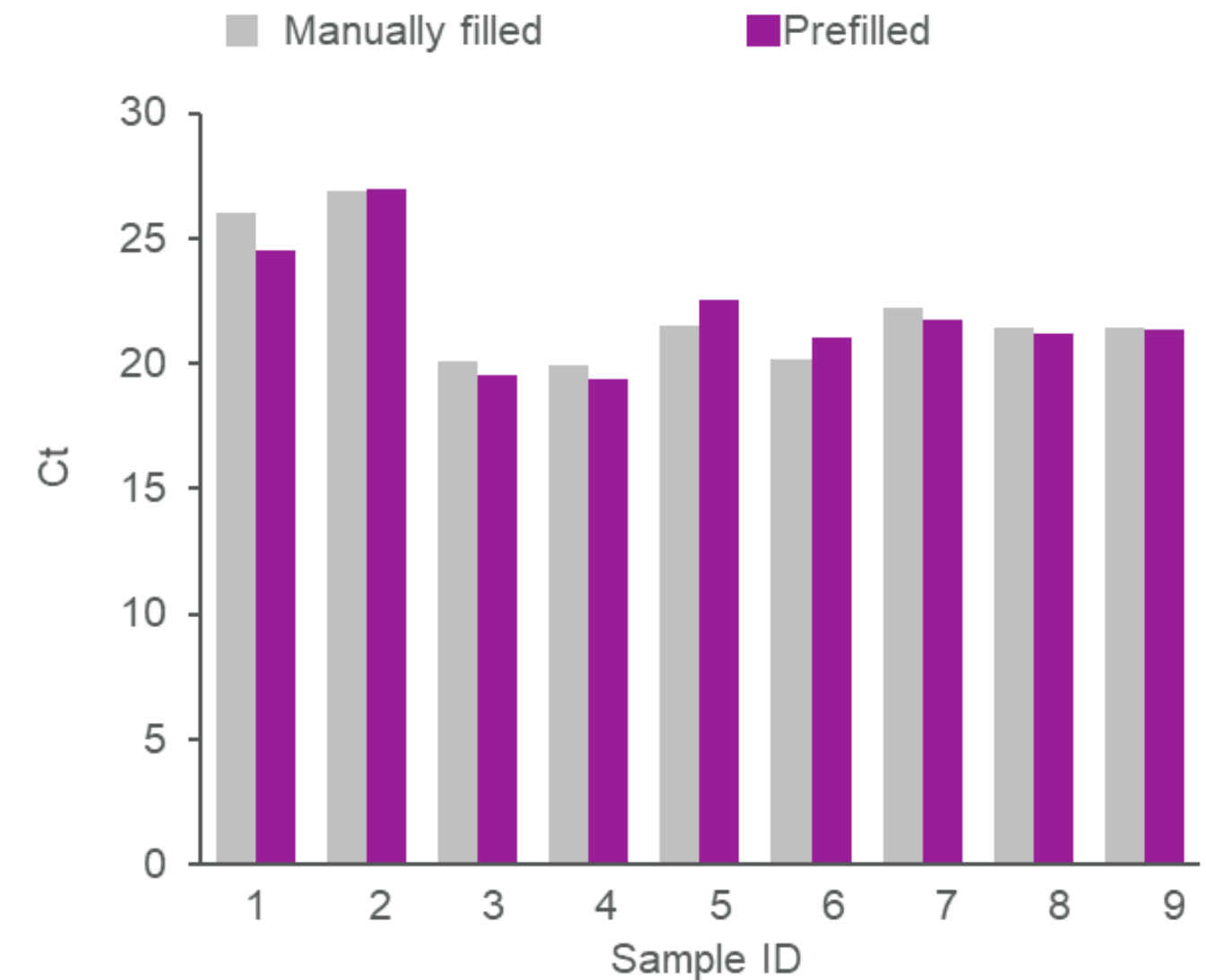
Manually filled



Prefilled



Extraction kit	IndiMag Pathogen Kit	Prefilled IndiMag Pathogen Kit
Instrument	IndiMag 48	IndiMag 48
Technology	Magnetic bead	Magnetic bead
Run time	49 mins	34 mins



Samples: EDTA blood of ASFV infected domestic pigs (source: FLI, Germany)

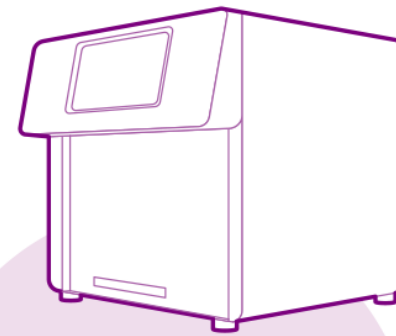
Indical Diagnostic Solutions

INDICAL
BIOSCIENCE



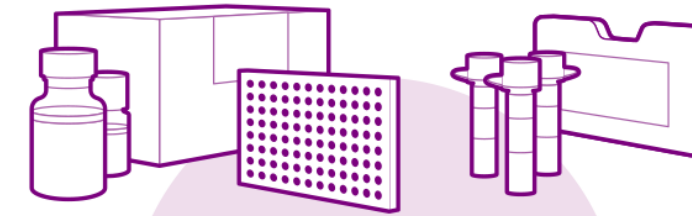
Sample preparation

Extraction kits and reagents for efficient isolation of nucleic acids from a variety of sample types.



Instruments

For high- to low-throughput testing



Assays

Ready-to-use, pathogen-specific PCR assays, reagents and ELISA kits



Analysis

Tools and technology for the reliable conversion of data to insight.

**Q Fever –
Bactotype
C. burnetii PCR Kit**

Do not publish without written consent from INDICAL BIOSCIENCE GmbH, Deutscher Platz 5b, 04103 Leipzig, Germany. For up-to-date licensing information and product-specific disclaimers, see the respective handbook or user manual. Assays for veterinary use only. Reagents for research use only, not for use in diagnostic procedures. Regulatory requirements vary by country, products may not be available in your geographic area. ELISA and PCR Kits availability/distribution outside US/Canada. Registered names, trademarks, etc., used in this document, even when not specifically marked as such, are not to be considered unprotected by law. Product images may differ from the actual product. © 2019 INDICAL BIOSCIENCE

qPCR Protocol

- Master Mix volume: 20µl; Sample volume: 5µl
- IC included in Master Mix (β-Actin DNA)



bactotype C. burnetii PCR kit:

Master Mix
Negative Control
Positive Control
Cox Standard

20µl Master Mix
5µl sample

PCR program: **Mastitis; 1h**

95°C	5min	} 40x
95°C	10sec	
57°C*	30sec	

* Fluorescence data collection

FAM – Pathogen
HEX – IC

Influenza A testing solutions



Do not publish without written consent from INDICAL BIOSCIENCE GmbH, Deutscher Platz 5b, 04103 Leipzig, Germany. For up-to-date licensing information and product-specific disclaimers, see the respective handbook or user manual. Assays for veterinary use only. Reagents for research use only, not for use in diagnostic procedures. Regulatory requirements vary by country, products may not be available in your geographic area. ELISA and PCR Kits availability/distribution outside US/Canada. Registered names, trademarks, etc., used in this document, even when not specifically marked as such, are not to be considered unprotected by law. Product images may differ from the actual product. © 2019 INDICAL BIOSCIENCE

Advanced testing solutions available from INDICAL

Magnetic bead-based or spin column-based nucleic acid extraction

- IndiMag Pathogen Kit
- IndiSpin Pathogen Kit
- IndiSpin QIAcube HT Pathogen Kit



Detection of Influenza A Virus RNA (RT-qPCR)

- virotype Influenza A RT-PCR Kit
- virotype Influenza A H5/H7/H9 RT-PCR Kit



Detection of antibodies to Influenza A Virus (ELISA)

- flocktype AIV Ab



Preparation of mix and filter settings

Preparation of reaction mix

Component	Volume
Master Mix	20 µl
Sample	5 µl
Total volume	25 µl

Filter settings for the reporter

Pathogen / internal control	Reporter
Influenza A subtype H5	FAM
Influenza A subtype H7	Cy5
Influenza A subtype H9	HEX / JOE
Internal control	Texas Red / ROX

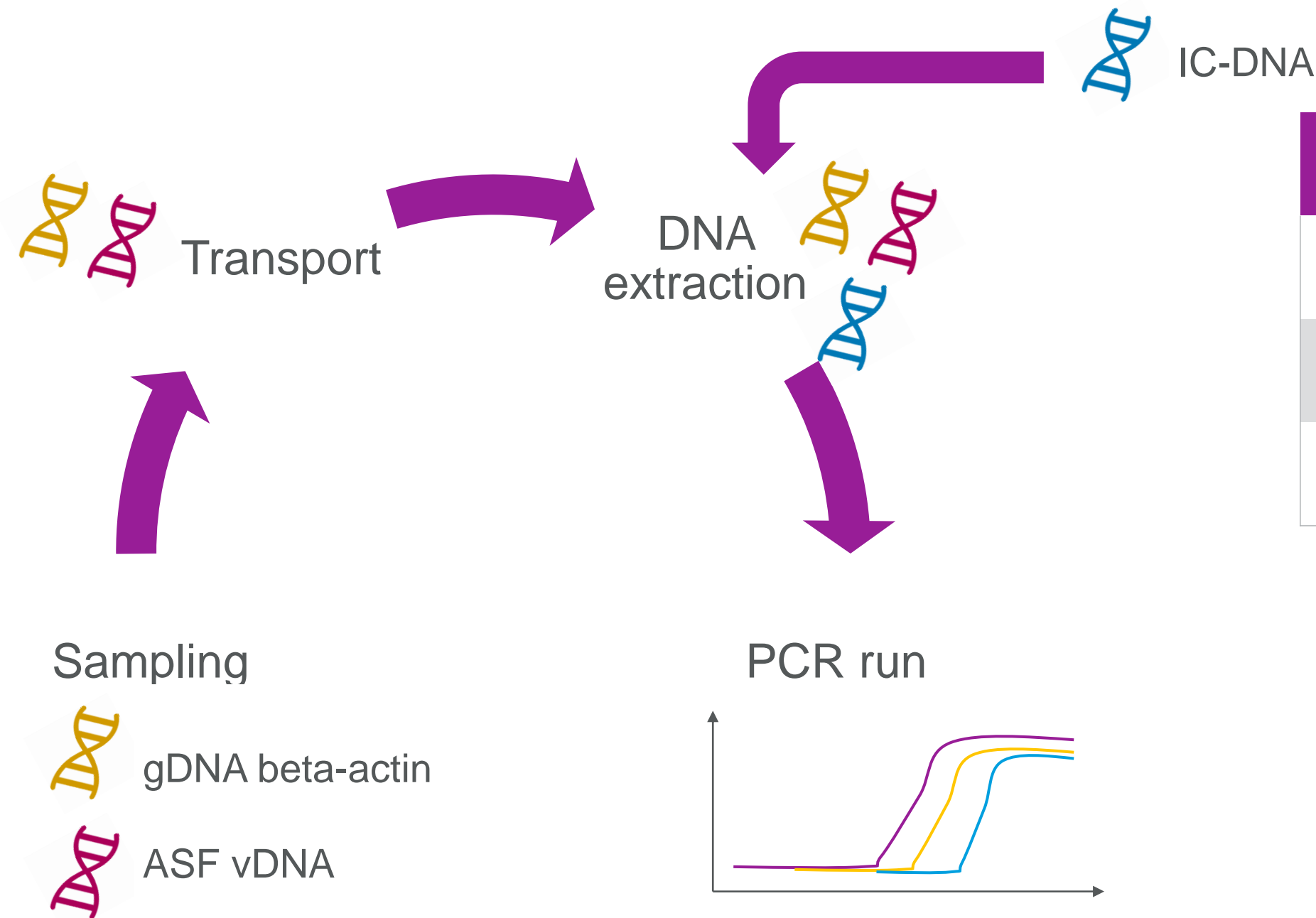
Fast thermal cycling protocol: approx. 67 min (Stratagene Mx3005P)

New and available : virotype ASFV 2.0 PCR Kit



- **Triplex real-time PCR assay** for the detection of DNA from African Swine Fever Virus
- for the detection of DNA from ASFV in serum, plasma, EDTA-blood, tissue, and swab samples from pigs and wild boars.
- **Double control strategy** offers a higher level of confidence in the interpretation of results, especially when testing difficult sample material
 - **Endogenous Internal Control** (β -actin)
 - **Exogenous Internal Control** (added to the lysis buffer)

The double Internal Control system



Target	Label
ASFV	FAM
Endogenous Control (beta actin)	HEX
Exogenous Control (IC-DNA)	Cy5

- ✓ Endogenous controls (“EC”) confirms that the sample is from animal origin and valid for DNA diagnostic
- ✓ Exogenous control („IC“) confirms the extraction and PCR workflow are succesful

Exogenous Control: Intype RNA/DNA, ref 509289970 y 509289980

And an extensive portfolio of PCR and ELISA assays across many animal/food segments*

Avian and poultry

- Influenza A Virus
- **Influenza A typing (H5/H7/H9) – New!**
- *Mycoplasma gallisepticum*
- *Mycoplasma synoviae*
- Salmonella

Ruminants

- BTV (Bluetongue Virus)
- BHV1 (Bovine Herpes Virus 1)
- BVDV (Bovine Viral Diarrhea Virus)
- **Coxiella burnetii (Q-fever) – New!**
- Main Mastitis causing pathogens
- MAP (*Mycobacterium avium* spp. *Paratuberculosis*)
- SBV (Schmallenberg Virus)
- Ruminant Interferon-gamma

Swine pathogen detection

- African Swine Fever / **ASFV 2.0 – New!**
- CSFV /CSFV DIVA (Classical Swine Fever)
- B. Hyo (*Brachyspira hyodysenteriae*)
- TGEV (Transmissible Gastroenteritis)
- Influenza A Virus
- PDCoV (Porcine Deltacoronavirus)
- PEDV (Porcine Epidemic Diarrhea Virus)
- PRRSV (Porcine Reproductive and Respiratory Syndrome Virus)
- Salmonella
- *Toxoplasma gondii*
- *Trichinella* spp.
- *Yersinia* spp.

Equine

- *Taylorella equigenitalis*
- *Klebsiella pneumoniae*
- *Pseudomonas aeruginosa*

DNA/RNA purification

- IndiSpin Pathogen
- IndiSpin Mastitis
- IndiMag Pathogen with 96 format Plastics – *Will be discontinued*
- IndiMag Pathogen w/o Plastics
- 96-format plastics – **Soon available!**
- IndiMag Plastics
- IndiMag Pathogen Prefilled in IndiMag 8 and 24 formats – **Soon!**
- IndiMag Pathogen Prefilled in KingFisher 96/Flex 96 format – **Soon!**

PCR enzymes with Internal controls

- virotype Mix IC(JOE)-DNA – **New!**
- virotype Mix IC(JOE)-RNA – **New!**
- virotype Mix IC(TAMRA)-DNA
- Intype RNA/DNA

*Not all available everywhere

Otros kits



SV-104893	SVANOVIR Brucella-AB C-ELISA
SV-104894	SVANOVIR Brucella-AB C-ELISA
SV-122275	SVANOVIR L Intracellularis/Ileitis-Ab
SV-104879	SVANOVIR® IBR-Ab
SV-104906	SVANOVIR® PRV gB-A
SV-104882	SVANOVIR® BVDV-Ab
SV-104905	SVANOVIR® PRV gB-Ab
SV-104897	SVANOVIR® O. ostertagi-Ab
SV-104885	SVANOVIR® BLVgp51-Ab
SV-104878	SVANOVIR® IBR-Ab
SV-104889	SVANOVIR® PIV3-Ab
SV-104888	SVANOVIR® BRSV-Ab
SV-104887	SVANOVIR® BCV-Ab
SV-104896	SVANOVIR® F. hepatica-Ab
SV-104890	SVANOVIR® Brucella-Ab I-ELISA
SV-104909	SVANOVIR® TGEV/PRCV-Ab
SV-104904	SVANOVIR® PRV gE-Ab
SV-104898	SVANOVIR® Neospora-Ab
SV-104881	SVANOVIR® BVDV-Ab
SV-104886	SVANOVIR® BLVgp51-Ab screen
SV-104901	SVANOVIR® EHV1/EHV4-Ab
SV-104902	SVANOVIR® PRV gE-Ab
SV-104883	SVANOVIR® BVDV-Ab screen
SV-104884	SVANOVIR® BLVgp51-Ab

Kits diagnósticos para animales de compañía



Ref	Descripción
INBAED-KIT	ANAPLASMA-ELISA DOG
INBBED-KIT	BABESIA-ELISA DOG
INBEED-KIT	EHRlichIA-ELISA DOG
INBLED-KIT	LEISHMANIA ELISA DOG
INBSED-KIT	SARCOPTES-ELISA 2001® DOG
INBSEP-KIT	SARCOPTES-ELISA 2001® PIG
INBFEC-KIT	FCoV- ELISA CAT





Thank you !