

# 2025 PRODUCT SUMMARY



## Atila BioSystems, Inc.

### Molecular Diagnostics

- Infectious Diseases
- Reproductive Health
- Cancer Diagnostics
- High-Multiplex DNA Extraction-Free qPCR Tests
- Real-Time PCR Tests
- Digital PCR (dPCR) Tests
- Next Generation Sequencing (NGS)

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# About Atila BioSystems

Since 2009, Atila BioSystems has been dedicated to advancing novel chemistries for nucleic acid amplification and detection, transforming clinical diagnostics with faster, more accessible solutions.

Molecular diagnostic assays are at the forefront of modern healthcare, offering critical insights for patient care. However, conventional assays can be costly, complex, and time-consuming. Atila BioSystems is revolutionizing the diagnostic landscape with cutting-edge molecular assays designed for **rapid results, enhanced accuracy, and extraction-free streamlined workflows.**

We are pioneers in nucleic acid amplification, leading the way in both **isothermal amplification** and **polymerase chain reaction (PCR) technologies** with our proprietary **3N PCR** and **Omega Technology**, which eliminate primer dimers and non-specific amplification while enhancing sensitivity for fast, affordable, high quality multiplex real-time detection. Our **BioDome Technology** is the best solution to solve lab contamination issues related to nucleic acid/PCR amplification.

Atila's comprehensive portfolio includes a full menu of assays across infectious diseases, oncology, and genetic testing, as well as user friendly devices that bring lab grade performance across a range of clinical and point-of-care settings. We have 7 issued patents and 5 pending patents.

**Join us in redefining the future of molecular diagnostics.**



iAMP Personal Station Real-Time PCR System



ai POCT Dock (coming soon)



Nucleic Acid Extraction System



Power-Gene 9600 Plus Real-Time PCR Equipment



iAMP Automatic Instrument

# Product Summary

## Extraction Free Assays

- High Multiplex Assays
- Blood Screening Assays
- Antibiotic Resistance Assays
- Monkey Pox Assay
- Cervical Cancer Screening
- Vector-Borne Diseases
- STI Assays
- Women's Health Panel
- Respiratory Analysis

### Workflow

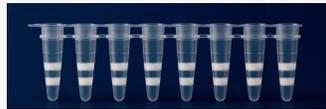
Step 1



Sample Processing Steps  
(Steps depend on sample type)



Step 2



Transfer 10 $\mu$ l sample into  
prepacked Zebra BioDome  
strips or plates.



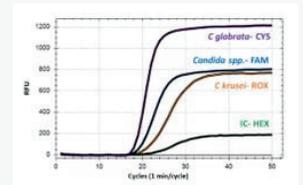
Step 3



Load Reaction



Step 4



**Results in 60 minutes**

## Extraction Free Assays

### High-Multiplex Assays

#### *iAMP-UTI-96*

- **iAMP UI Solution Assay** | Simultaneously detects 15 groups of common UTI pathogens. (RUO)

<i>Acinetobacter baumannii</i>	<i>Klebsiella pneumoniae</i>
<i>Citrobacter spp.</i>	<i>Morganella morganii</i>
<i>Enterobacter cloacae</i>	<i>Proteus spp.</i>
<i>Enterococcus spp.</i>	<i>Providencia stuartii</i>
<i>Escherichia coli</i>	<i>Pseudomonas aeruginosa</i>
<i>Klebsiella aerogenes</i>	<i>Staphylococcus saprophyticus</i>
<i>Klebsiella oxytoca</i>	<i>Streptococcus agalactiae</i>
	<i>Candida albicans</i>

#### *AT-NFP-96*

- **Atila Nail Fungus Panel** | Simultaneously detects for 15 fungal pathogens commonly found in nail infections. (RUO)

<i>Trichophyton spp.</i> <sup>1</sup>	<i>Candida spp.</i> <sup>2</sup>
<i>Sarocladium strictum</i>	<i>Fusarium Solani</i>
<i>NeoScytalidim d/h</i>	<i>Alternaria</i>
<i>Aspergillus</i>	<i>Trichosporon</i>
<i>Scopulariopsis Brevicaulis</i>	<i>Epidermophyton Floccosum</i>
<i>Geotrichum candidum</i>	<i>Cryptococcus</i>
<i>Curvularia spp.</i> <sup>1</sup>	<i>Neofusicoccum mangiferae</i>
	<i>Microsporum audouinii/canis</i>

<sup>1</sup> Primer design is based on the entire genus

<sup>2</sup> *Candida albicans*, *Candida glabrata*, *Candida tropicalis*, *Candida parapsilosis*, *Candida krusei*, and *Candida lusitanae*.

### High-Multiplex Assays

#### *iAMP-WD-96*

- **iAMP Wound Panel** | Simultaneously detects for 19 pathogen including bacterial, viral and fungal species commonly found in wound. (RUO)

#### Bacteria

<i>Acinetobacter baumannii</i>	<i>Klebsiella pneumoniae</i>
<i>Anaerococcus spp.</i> <sup>1</sup>	<i>Proteus spp.</i> <sup>4</sup>
<i>Bacteroides fragilis</i>	<i>Pseudomonas aeruginosa</i>
<i>Citrobacter spp.</i> <sup>2</sup>	<i>Serratia marcescens</i>
<i>Enterococcus spp.</i> <sup>3</sup>	<i>Staphylococcus aureus</i>
<i>Escherichia coli</i>	<i>Staphylococcus epidermidis</i>
<i>Klebsiella oxytoca</i>	<i>Streptococcus agalactiae</i>
	<i>Streptococcus pyogenes</i>

#### Virus

*Herpes simplex virus 1*

#### Fungi

*Candida spp.*<sup>5</sup>  
*Candida glabrata*  
*Candida krusei*

<sup>1</sup> *Anaerococcus prevotii*, *Anaerococcus vaginalis*

<sup>2</sup> *Citrobacter freundii*, *Citrobacter werkmanii*, *Citrobacter cronae*, *Citrobacter portucalensis*, *Citrobacter arsenatis*, *Citrobacter europaeus*, *Citrobacter braakii*

<sup>3</sup> *Enterococcus faecalis*, *Enterococcus faecium*, *Enterococcus lactis*

<sup>4</sup> *Proteus mirabilis*, *Proteus vulgaris*, *Proteus penneri*, *Proteus hauseri*, *Proteus terrae*, *Proteus columbae*

<sup>5</sup> *Candida albicans*, *Candida dubliniensis*, *Candida tropicalis*, *Candida parapsilosis*

## Extraction Free Assays

### High-Multiplex Assays

#### *iAMP-SEP-96*

- **iAMP Sepsis Panel** | Simultaneous detects 30 common sepsis causing pathogens & 11 biomarkers for resistance. (RUO)

##### Panel Pathogens

<i>Escherichia coli</i>	<i>Klebsiella oxytoca</i>
<i>Enterococcus faecalis</i>	<i>Acinetobacter baumannii</i>
<i>Candida spp.</i> <sup>2</sup>	<i>Haemophilus influenzae</i>
<i>Serratia marcescens</i>	<i>Klebsiella aerogenes</i>
<i>Enterococcus faecium</i>	<i>Pseudomonas aeruginosa</i>
<i>Candida krusei</i>	<i>Neisseria meningitidis</i>
<i>Staphylococcus epidermidis</i>	<i>Bacteroides fragilis</i>
<i>Enterococcus gallinarum</i>	<i>Streptococcus pyogenes</i>
<i>Candida glabrata</i>	<i>Proteus mirabilis</i>
<i>Staphylococcus aureus</i>	<i>Candida auris</i>
<i>Stenotrophomonas maltophilia</i>	<i>Staphylococcus lugdunensis</i>
<i>Streptococcus pneumoniae</i>	<i>Cryptococcus neoformans gattii</i>
<i>Klebsiella pneumoniae</i>	<i>Listeria monocytogenes</i>
<i>Streptococcus agalactea</i>	<i>Salmonella spp.</i> <sup>1</sup>
<i>Enterobacter cloacae</i>	<i>Streptococcus mitis</i>

##### Drug Resistant Markers

CTX	MecA
OXA-48	KPC
IMP	VanA
NDM	VanB
VIM	TEM
	MCR-1

<sup>1</sup>Primer design is based on the entire genus

<sup>2</sup>*Candida albicans*, *Candida tropicalis*, *Candida parapsilosis*, and *Candida dubliniensis*

### High-Multiplex Assays

#### *iAMP-BMS-96*

- **iAMP Bacterial Meningitis Panel** | Simultaneously detects 7 pathogens commonly found in Bacterial Meningitis, and 8 groups of common drug-resistant gene markers. (RUO)

##### Drug Resistance Genes

Carbapenemase genes(NDM, KPC, OXA-48, VIM, IMP)  
 Extended Spectrum beta-lactamase(ESBL) gene(CTX-M1)  
 Vancomycin resistance genes(VanA, VanB)  
 Oxacillin/methicillin resistance gene(MecA)  
 Sulfonamide resistance genes (SUL1, SUL2, SUL3)  
 Trimethoprim resistance genes(dfrA1, dfrA5, dfrA12, dfrA17)  
 Plasmid-mediated quinolone resistance marker(QnrS)  
 Macrolide resistance(MefA, MrsA, ermA, ermB, ermC, ereA, mphA)

##### Pathogens

*H. influenzae*  
*L. monocytogenes*  
*N. meningitidis*  
*S. agalactiae*  
*S. pneumoniae*  
*E. coli*  
*C. neoformans*

## Extraction Free Assays

### Blood Screening Assays

#### AMPF-HIV-96

- **HIV Detection Kit** | Detects Human Immunodeficiency Virus Type 1 (HIV-1). (RUO)

#### AMPF-HBV-96

- **HBV Detection Kit** | Detects Human Hepatitis B Virus (HBV). (RUO)

#### AMPF-HCV-96

- **HCV Detection Kit** | Detects Human Hepatitis C Virus (HCV). (RUO)

### Antibiotic Resistance Assays

#### iAMP-DRFP-96

- **iAMP Drug Resistance Panel** | Detects 24 drug resistance (DR) gene markers (RUO)

KPC	VanA	Qnrs	MrsA
NDM	VanB	dfrA1	ermA
OXA-48	MecA	dfrA5	ermB
IMP	SUL1	dfrA12	ermC
VIM	SUL2	dfrA17	mphA
CTX	SUL3	MefA	ereA

#### iAMP-NGResis-96

- **iAMP NG Resistance Assay** | Detects gyrA S91F (mutant) markers in *Neisseria gonorrhoeae*. (RUO)

#### iAMP-MGResis-96

- **iAMP MG Resistance Assay** | Detects mutations at positions 2058 and 2059 in the 23S rRNA gene in *M. genitalium*. (RUO)

### Monkey Pox Assay

#### MPX-96-RUO

- **AmpFire Monkeypox Assay** | Detects Monkeypox virus (MPXV) in subtypes from the West African clade and the Congo Basin (Central African) clade. (RUO)

### Cervical Cancer Screening

#### M5FHPV-96

- **ScreenFire HPV RS Kit** | Detects 13 HPV genotypes with identification of HPV16, HPV18/45, HPV31/33/35/52/58, and HPV39/51/56/59/68 in groups for risk stratification related to cancer caused by these high-risk HPV genotypes. (RUO)

#### MHPVF1618-96

- **AmpFire HPV Screening 16/18/HR** | Detects 14 types of high-risk HPV and simultaneously genotypes HPV 16 and HPV 18 with isothermal real-time fluorescent detection. (RUO)

#### GHPVF-96

- **AmpFire HPV High-Risk Genotyping** | Genotypes 15 high-risk Human Papillomavirus (HPV) genotypes (16, 18, 31, 33, 35, 39, 45, 51, 52, 53, 56, 58, 59, 66, 68). (RUO)

### Vector-Borne Diseases

#### MAL-96-RUO

- **AmpFire Malaria Assay** | Detects 5 *Plasmodium* species responsible for Malaria. (RUO)

<i>Plasmodium falciparum</i>	<i>Plasmodium malariae</i>
<i>Plasmodium vivax</i>	<i>Plasmodium knowlesi</i>
<i>Plasmodium ovale</i>	

### Neonatal Screening

#### iAMP-cCMV-96

- **iAMP cCMV Detection Kit** | Detects congenital CMV, also called human herpesvirus 5 (HHV-5) and human cytomegalovirus (HCMV). (RUO)

## Extraction Free Assays

### Sexually Transmitted Infections (STI) Assays

#### [iAMP-TP-96](#)

- **iAMP Syphilis Detection Kit** | Detects *Treponema pallidum subspecies pallidum*. (RUO)

#### [iAMP-CT-96](#)

- **iAMP CT Detection Kit** | Detects *Chlamydia trachomatis* (CT) in urogenital or ocular swab or urine specimens. (RUO)

#### [iAMP-4STI-96](#)

- **iAMP CT/NG/TV/MG Detection Kit** | Simultaneously detects *Neisseria gonorrhoeae*, *Chlamydia trachomatis*, *Trichomonas vaginalis*, *Mycoplasma genitalium*. (RUO)

#### [iAMP-HSV-96](#)

- **iAMP HSV 1/2 Detection Kit** | Detects Herpes Simplex Virus 1 & 2. (RUO)

#### [iAMP-GBS-96](#)

- **iAMP Group B Streptococcus Detection Kit** | Detects Group B Streptococcus (GBS). (RUO)

#### [iAMP-MH-96](#)

- **iAMP Mycoplasma hominis Detection Kit** | Detects *Mycoplasma hominis*. (RUO)

#### [iAMP-UUUP-96](#)

- **iAMP Ureaplasma Detection Kit** | Detects and differentiates *Ureaplasma parvum* (UP) and *Ureaplasma urealyticum* (UU). (RUO)

#### [iAMP-CAN-96](#)

- **iAMP Candidiasis Detection Kit** | Detects six *Candida* species (*C. albicans*, *C. tropicalis*, *C. parapsilosis*, *C. dubliniensis*, *C. glabrata*, *C. krusei*), with specific identification of *C. glabrata* and *C. krusei*. (RUO)

#### [iAMP-BV-96](#)

- **iAMP Bacterial Vaginosis Detection Kit** | Detects *Gardnerella vaginalis*, *Atopobium vaginae*, *BVAB-2*, *Megasphaera-1*, and *Megasphaera-2*. (RUO)

#### [iAMP-VAG-96](#)

- **iAMP Vaginal Panel** | Detects bacterial vaginosis, candidiasis, and trichomoniasis. (RUO)

### Women's Health Panel

The Atila Women's Health Panel (ATWH) consists of an internal control assay targeting human cells and 7 different detection kits for bacterial and fungal pathogens commonly found in women's genitalia and urine. **ATWH includes 6 of the below targets and can be ordered in any combination.** (RUO)

[ATWH-IC-96](#)

[ATWH-4STI-96](#)

[ATWH-HSV-96](#)

[ATWH-MH-96](#)

[ATWH-UUUP-96](#)

[ATWH-BV-96](#)

[ATWH-CAN-96](#)

## Extraction Free Assays

### Respiratory Analysis

#### *iAMP-COVID19-96*

- **iAMP Covid-19 Detection Kit (RUO)**

#### *iAMP-COVSANO-96*

- **iAMP Covid-19 SANO Assay** | Detects RNA and later cDNA from the N and ORF-1ab genes of the SARS-CoV-2 virus in swab or saliva specimens. (RUO)

#### *iAMP-COVFLU-96*

- **iAMP COV2/INF Detection Kit** | Identifies and detects SARS-CoV-2, Influenza A, and Influenza B in a single reaction. (RUO)

#### *iAMP-INFRSV-96*

- **iAMP INF/RSV Detection Kit** | Identifies and differentiates Influenza A, Influenza B, and Respiratory Syncytial Virus (RSV) in a single reaction. (RUO)

#### *iAMP-COVFLURSV-96*

- **iAMP COV/FLU/RSV Detection Kit** | Enables simultaneous qualitative detection and differentiation of SARS-CoV-2, Influenza A, Influenza B, and RSV. (RUO)

#### *iAMP-GAS-96*

- **iAMP Group A Streptococcus Detection Kit** | Detects *Streptococcus pyogenes*. (RUO)

#### *iAMP-RPP-96*

- **iAMP Respiratory Panel** | Identifies and differentiates 19 common bacterial and viral pathogens responsible for respiratory infections. (RUO)

Respiratory syncytial virus	Human metapneumovirus
Influenza A	Mycoplasma pneumonia
Influenza B	Klebsiella pneumonia
SARS-CoV-2	Bordetella parapertussis
Rhinovirus	Bordetella pertussis
Enterovirus	Streptococcus pneumonia
Coronavirus (229E, HKU1, OC43, NL63)	Haemophilus influenzae
Parainfluenza virus (1-4)	Legionella pneumophila
Human adenovirus	Chlamydia pneumonia
	Human bocavirus

### Respiratory Analysis

#### *iAMP-RSV-96*

- **iAMP RSV Detection Kit** | Detects RSV A and RSV B. (RUO)

#### *MTB-96-RUO*

- **AmpFire MTB Assay** | Detects *Mycobacterium tuberculosis* (MTB), *Mycobacterium bovis*, *Mycobacterium africanum*, *Mycobacterium canettii*, and *Mycobacterium microti*. (RUO)

#### *iAMP-H5N1-96*

- **iAMP H5N1 Detection Kit** | Detects both Hemagglutinin (H5 gene) and Neuraminidase (N1 gene) of H5N1. (RUO)

#### *iAMP-SPne-96*

- **iAMP Streptococcus pneumoniae Detection Kit** | Detects *Streptococcus pneumoniae*. (RUO)

### Fungal Infections

#### *iAMP-CAU-96*

- **iAMP C auris Detection Kit** | Detects *Candida auris* (C. auris). (RUO)

### Viral Infections

#### *iAMP-EBV-96*

- **iAMP EBV Detection Kit** | Detects human herpes virus 4 (HHV-4) also known as Epstein-Bar Virus (EBV) DNA. (RUO)

# PCR Assays

- Blood Screening Assays
- Gender Determination
- Infectious Disease Assays

## Workflow

Step 1



Sample Processing Steps  
(Steps depend on sample type)



Step 2



Load mix into PCR plate wells



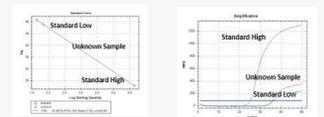
Step 3



Load Reaction



Step 4



Interpret Results  
**(Results in 2 hours)**

## PCR Assays

### Blood Screening Assays

#### ASCD-100-RUO

- **Atila Sickle Cell Disease Detection Kit** | A real-time nucleic acid amplification assay for the in vitro qualitative detection of mutations associated with sickle cell disease (SCD). (RUO)

#### AHBV-100

- **Atila HBV Assay Kit** | A real-time PCR assay for the in vitro quantitative detection of Human Hepatitis B Virus (HBV) DNA. (RUO)

#### AHCV-100

- **Atila HCV Assay Kit** | A real-time reverse transcription assay test for the in vitro quantitative detection of Human Hepatitis C Virus (HCV) RNA. (RUO)

#### AHIV-100

- **Atila HIV Assay Kit** | A real-time reverse transcription assay test for the in vitro quantitative detection of Human Immunodeficiency Virus Type 1 (HIV-1) RNA. (RUO)

#### ABSA-100

- **Blood Screening PCR Assay Kit** | A real-time reverse transcription assay test for the in vitro qualitative detection of Human Immunodeficiency Virus Type 1 (HIV-1) Group M RNA, HIV-1 Group O RNA, Hepatitis C Virus (HCV) RNA, and Hepatitis B Virus (HBV) DNA. (RUO)

### Gender Determination

#### qGD-100-RUO

- **Atila Gender Determination Kit** | A real-time nucleic acid amplification assay for the in vitro detection of Y chromosome gene from cell-free fetal DNA circulating in the mother's bloodstream during pregnancy. This test can be used to determine the baby's gender from as early as 6-8 weeks of gestation. (RUO)

### Infectious Disease Detection Kits

#### AP-CD-100

- **Clostridium difficile Real-Time PCR Detection Kit** (RUO)

#### AP-MP-100

- **Mycoplasma pneumoniae Real-Time PCR Detection Kit** (RUO)

#### AP-HA-100

- **Haemophilus influenzae Real-Time PCR Detection Kit** (RUO)

#### AP-SA-100

- **Salmonella Real-Time PCR Detection Kit** (RUO)

#### AP-STA-100

- **Staphylococcus aureus Real-Time PCR Detection Kit** (RUO)

#### AP-STR-100

- **Streptococcus pneumoniae Real-Time PCR Detection Kit** (RUO)

#### AP-HP-100

- **Helicobacter pylori Real-Time PCR Detection Kit** (RUO)

#### AP-KP-100

- **Klebsiella pneumoniae Real-Time PCR Detection Kit** (RUO)

#### AP-GAS-100

- **Streptococcus pyogenes Real-Time PCR Detection Kit** (RUO)

#### AP-GBS-100

- **Streptococcus agalactiae Real-Time PCR Detection Kit** (RUO)

#### AP-CJ-100

- **Campylobacter jejuni Real-Time PCR Detection Kit** (RUO)

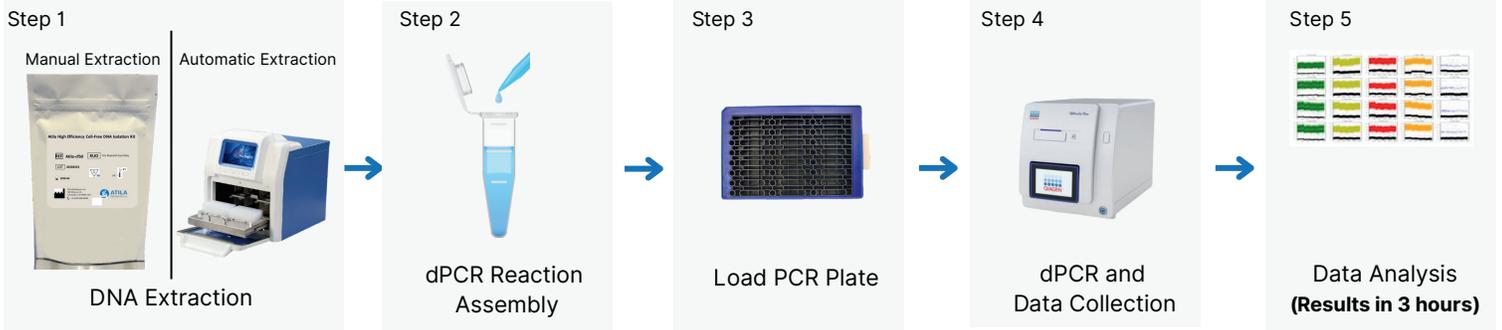
#### AP-LI-100

- **Listeria monocytogenes Real-Time PCR Detection Kit** (RUO)

# Digital PCR Assays

- Liquid Biopsy, ctDNA/cfDNA Tests
- MRD, Minimum Residual Diseases
- Oncology Testing
- Prenatal Testing
- IVF
- Leukemia

## Workflow



## Digital PCR Assays

### Blood Screening

#### ASCD-100Q-RUO

- **Atila Sickle Cell Disease Detection Kit** | Detects hemoglobin variants HbS, HbC, and HbA individually. Variants HbD, HbO, and HbE can also be detected, although they cannot be distinguished from one another. In addition, the assay can identify compound heterozygous genotypes (e.g., HbSC, HbSE, HbAE). Compatible with QIAGEN QIAcuity. (RUO)

#### ASCD-100B-RUO

- **Atila Sickle Cell Disease Detection Kit** | Detects hemoglobin variants HbS, HbC, and HbA individually. Variants HbD, HbO, and HbE can also be detected, although they cannot be distinguished from one another. In addition, the assay can identify compound heterozygous genotypes (e.g., HbSC, HbSE, HbAE). Compatible with QX600™ Droplet Digital™ PCR System. (RUO)

#### AHBV-100Q, AHBV-100B

- **Atila HBV Assay Kit** | Quantitative detection of human hepatitis B virus (HBV) DNA on QIAcuity™ system or the Bio-Rad QX200/QX600™ system. (RUO)

#### AHCV-100Q, AHCV-100B

- **Atila HCV Assay Kit** | Quantitative detection of human hepatitis C virus (HCV) DNA on QIAcuity™ system or the Bio-Rad QX200/QX600™ system. (RUO)

#### AHIV-100Q, AHIV-100B

- **Atila HIV Assay Kit** | Quantitative detection of human immunodeficiency virus type 1 (HIV-1) RNA on QIAcuity™ system or the Bio-Rad QX200/QX600™ system. (RUO)

### Prenatal Testing

#### NIPT-100Q

- **iSAFE Non-Invasive Prenatal Test Kit** | Detects Trisomy 21, Trisomy 18, Trisomy 13, fetal fraction, and gender determination. (RUO)

#### NIPT-100QS

- **iSAFE Non-Invasive Prenatal Test Kit** | Detects Trisomy 21, 18, 13, sex chromosome aneuploidy, fetal fraction, and gender determination. (CE/IVDR)

#### NIPT-FF-100Q

- **iSAFE NIPT Fetal Fraction Determination Assay Kit.** (RUO)

#### NIPT-Y-100Q

- **iSAFE NIPT Gender and Fetal Fraction Determination Assay Kit.** (RUO)

#### NIPT-GS-100Q

- **iSAFE NIPT Genomic DNA Contamination Determination Assay.** (RUO)

#### PGTA-100

- **iSAFE PGT-A Kit** | Preimplantation genetic testing for aneuploidies (PGT-A) of all 24 chromosomes & the 22q deletion region after whole genome amplification. (CE/IVDR)

#### ATILA-WGA-24

- **Atila Whole Genome Amplification Kit** | For Atila PGTA testing. (RUO)

#### dRhDGT-100Q-RUO

- **iSAFE™ dPCR Rhesus D Genotyping Kit** | Detects exon 4, exon 4 pseudogene form, exon 5 and exon 7 on chromosome 1. (RUO)

#### MDT5-100

- **iSAFE Microdeletions Testing Kit** | Quantification of chromosomal microdeletions of 4p16.3, 22q11.2, 5p15.2-3, 7q11.23, and 15q11-q13. (RUO)

### Oncology Testing

#### *ACPD-LN-100*

- **Lung Cancer Mutation Screening Kit (CE-IVD)**

#### *ACPD-CR-100*

- **Colorectal Cancer Mutation Screening Kit (CE-IVD)**

#### *ACPD-EG-100*

- **EGFR Multiplex Mutation Screening Kit (CE-IVD)**

#### *ACPD-BR-100*

- **BRAF Multiplex Mutation Screening Kit (CE-IVD)**

#### *ACPD-KR-100*

- **KRAS Multiplex Mutation Screening Kit (CE-IVD)**

#### *ACPD-NR-100*

- **NRAS Multiplex Mutation Screening Kit (CE-IVD)**

#### *ACPD-PI-100*

- **PIK3CA Multiplex Mutation Screening Kit (CE-IVD)**

#### *ACPD-RE-100*

- **RET/MET Multiplex Mutation Screening Kit (CE-IVD)**

#### *ACPD-HE-100*

- **HER2 Multiplex Mutation Screening Kit (CE-IVD)**

#### *ACPD-TP53-100*

- **TP53 Multiplex Mutation Screening Kit (CE-IVD)**

#### *ACPD-AP-100*

- **APC Multiplex Mutation Screening Kit (CE-IVD)**

#### *BCRABL-100Q, BCRABL-100B*

- **Atila BCR-ABL Fusion Transcript Detection Kit |**  
Quantitative detection of BCR-Abl fusion transcripts (p210 and p190) in total RNA from whole blood of diagnosed t(9;22) positive Chronic Myeloid Leukemia (CML) individuals expressing BCR-ABL1 fusion transcripts type e13a2, e14a2, and/or e1a2. On QIAcuity™ system or the Bio-Rad QX200/QX600™ system. (RUO)

# Extraction Free Digital PCR Assays

- High Multiplex Assays
- Blood Screen Assays
- Antibiotic Resistance Assays
- Monkey Pox Assay
- Cervical Cancer Screening
- Vector-Borne Diseases
- STI Assays
- Women's Health Panel
- Respiratory Analysis

## Workflow

Step 1



Assay sample type  
in sample tube



Step 2



Add up to 750µL 1X  
Atila sample buffer



Step 3



Vortex & incubate at  
95C for 10 minutes



Step 4



Load PCR Plate



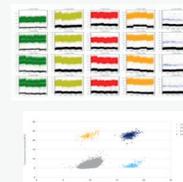
Step 5



dPCR and  
Data Collection



Step 6



Data Analysis  
**(Results in 1 hour)**

## Extraction Free Digital PCR Assays

### High-Multiplex Assays

#### *i*AMP-UTI-DG

- **Digital Urinary Tract Infection Assay** | Simultaneously quantifies 15 groups of common UTI pathogens. (RUO)

<i>Acinetobacter baumannii</i>	<i>Klebsiella pneumoniae</i>
<i>Citrobacter spp.</i>	<i>Morganella morganii</i>
<i>Enterobacter cloacae</i>	<i>Proteus spp.</i>
<i>Enterococcus spp.</i>	<i>Providencia stuartii</i>
<i>Escherichia coli</i>	<i>Pseudomonas aeruginosa</i>
<i>Klebsiella aerogenes</i>	<i>Staphylococcus saprophyticus</i>
<i>Klebsiella oxytoca</i>	<i>Streptococcus agalactiae</i>
	<i>Candida albicans</i>

#### *AT*-NFP-DG

- **Digital Nail Fungus Panel** | Simultaneously quantifies 15 fungal pathogens commonly found in nail infections. (RUO)

<i>Trichophyton spp.</i> <sup>1</sup>	<i>Candida spp.</i> <sup>2</sup>
<i>Sarocladium strictum</i>	<i>Fusarium Solani</i>
<i>NeoScytalidim d/h</i>	<i>Alternaria</i>
<i>Aspergillus</i>	<i>Trichosporon</i>
<i>Scopulariopsis Brevicaulis</i>	<i>Epidermophyton Floccosum</i>
<i>Geotrichum candidum</i>	<i>Cryptococcus</i>
<i>Curvularia spp.</i> <sup>1</sup>	<i>Neofusicoccum mangiferae</i>
	<i>Microsporium audouinii/canis</i>

<sup>1</sup> Primer design is based on the entire genus

<sup>2</sup> *Candida albicans*, *Candida glabrata*, *Candida tropicalis*, *Candida parapsilosis*, *Candida krusei*, and *Candida lusitanae*.

### High-Multiplex Assays

#### *i*AMP-WD-DG

- **Digital Wound Panel** | Simultaneously quantifies 19 pathogens including bacterial, viral and fungal species commonly found in wound. (RUO)

##### Bacteria

<i>Acinetobacter baumannii</i>	<i>Klebsiella pneumoniae</i>
<i>Anaerococcus spp.</i> <sup>1</sup>	<i>Proteus spp.</i> <sup>4</sup>
<i>Bacteroides fragilis</i>	<i>Pseudomonas aeruginosa</i>
<i>Citrobacter spp.</i> <sup>2</sup>	<i>Serratia marcescens</i>
<i>Enterococcus spp.</i> <sup>3</sup>	<i>Staphylococcus aureus</i>
<i>Escherichia coli</i>	<i>Staphylococcus epidermidis</i>
<i>Klebsiella oxytoca</i>	<i>Streptococcus agalactiae</i>
	<i>Streptococcus pyogenes</i>

##### Virus

*Herpes simplex virus 1*

##### Fungi

*Candida spp.*<sup>5</sup>  
*Candida glabrata*  
*Candida krusei*

<sup>1</sup> *Anaerococcus prevotii*, *Anaerococcus vaginalis*

<sup>2</sup> *Citrobacter freundii*, *Citrobacter werkmanii*, *Citrobacter cronae*, *Citrobacter portucalensis*, *Citrobacter arsenatis*, *Citrobacter europaeus*, *Citrobacter braakii*

<sup>3</sup> *Enterococcus faecalis*, *Enterococcus faecium*, *Enterococcus lactis*

<sup>4</sup> *Proteus mirabilis*, *Proteus vulgaris*, *Proteus penneri*, *Proteus hauseri*, *Proteus terrae*, *Proteus columbae*

<sup>5</sup> *Candida albicans*, *Candida dubliniensis*, *Candida tropicalis*, *Candida parapsilosis*

## Extraction Free Digital PCR Assays

### High-Multiplex Assays

#### *iAMP-SEP-DG*

- **Digital Sepsis Panel** | Simultaneous quantifies 30 common sepsis causing pathogens & 11 biomarkers for resistance. (RUO)

#### Panel Pathogens

<i>Escherichia coli</i>	<i>Klebsiella oxytoca</i>
<i>Enterococcus faecalis</i>	<i>Acinetobacter baumannii</i>
<i>Candida spp.</i> <sup>2</sup>	<i>Haemophilus influenzae</i>
<i>Serratia marcescens</i>	<i>Klebsiella aerogenes</i>
<i>Enterococcus faecium</i>	<i>Pseudomonas aeruginosa</i>
<i>Candida krusei</i>	<i>Neisseria meningitidis</i>
<i>Staphylococcus epidermidis</i>	<i>Bacteroides fragilis</i>
<i>Enterococcus gallinarum</i>	<i>Streptococcus pyogenes</i>
<i>Candida glabrata</i>	<i>Proteus mirabilis</i>
<i>Staphylococcus aureus</i>	<i>Candida auris</i>
<i>Stenotrophomonas maltophilia</i>	<i>Staphylococcus lugdunensis</i>
<i>Streptococcus pneumoniae</i>	<i>Cryptococcus neoformans gattii</i>
<i>Klebsiella pneumoniae</i>	<i>Listeria monocytogenes</i>
<i>Streptococcus agalactea</i>	<i>Salmonella spp.</i> <sup>1</sup>
<i>Enterobacter cloacae</i>	<i>Streptococcus mitis</i>

#### Drug Resistant Markers

CTX	MecA
OXA-48	KPC
IMP	VanA
NDM	VanB
VIM	TEM
	MCR-1

<sup>1</sup>Primer design is based on the entire genus

<sup>2</sup>*Candida albicans*, *Candida tropicalis*, *Candida parapsilosis*, and *Candida dubliniensis*

### High-Multiplex Assays

#### *iAMP-BMS-DG*

- **iAMP Bacterial Meningitis Panel** | Simultaneously quantifies 7 bacterial pathogens commonly found in Bacterial Meningitis, and 8 groups of common drug-resistant gene markers. (RUO)

#### Drug Resistance Genes

Carbapenemase genes(NDM, KPC, OXA-48, VIM, IMP)  
 Extended Spectrum beta-lactamase(ESBL) gene(CTX-M1)  
 Vancomycin resistance genes(VanA, VanB)  
 Oxacillin/methicillin resistance gene(MecA)  
 Sulfonamide resistance genes (SUL1, SUL2, SUL3)  
 Trimethoprim resistance genes(dfrA1, dfrA5, dfrA12, dfrA17)  
 Plasmid-mediated fluoroquinolone resistance marker(QnrS)  
 Macrolide resistance(MefA, MrsA, ermA, ermB, ermC, ereA, mphA)

#### Pathogens

*H. influenzae*  
*L. monocytogenes*  
*N. meningitidis*  
*S. agalactiae*  
*S. pneumoniae*  
*E. coli*  
*C. neoformans*

## Extraction Free Digital PCR Assays

### Blood Screen Assays

#### AMPF-HIV-DG

- **Digital HIV Detection Kit** | Quantifies Human Immunodeficiency Virus Type 1 (HIV-1). (RUO)

#### AMPF-HBV-DG

- **Digital HBV Detection Kit** | Quantifies Human Hepatitis B Virus (HBV). (RUO)

#### AMPF-HCV-DG

- **Digital HCV Detection Kit** | Quantifies Human Hepatitis C Virus (HCV). (RUO)

### Antibiotic Resistance Assays

#### iAMP-DRFP-DG

- **Digital Drug Resistance Panel** | Quantifies 24 drug resistance (DR) gene markers (RUO)

KPC	VanA	Qnrs	MrsA
NDM	VanB	dfrA1	ermA
OXA-48	MecA	dfrA5	ermB
IMP	SUL1	dfrA12	ermC
VIM	SUL2	dfrA17	mphA
CTX	SUL3	MefA	ereA

#### iAMP-NGResis-DG

- **Digital NG Resistance Assay** | Quantifies gyrA S91F (mutant) markers in *Neisseria gonorrhoeae*. (RUO)

#### iAMP-MGResis-DG

- **Digital MG Resistance Assay** | Quantifies mutations at positions 2058 and 2059 in the 23S rRNA gene in *M. genitalium*. (RUO)

### Vector-Borne Diseases

#### MAL-DG

- **AmpFire Digital Malaria Assay** | Quantifies 5 *Plasmodium* species responsible for Malaria. (RUO)

<i>Plasmodium falciparum</i>	<i>Plasmodium malariae</i>
<i>Plasmodium vivax</i>	<i>Plasmodium knowlesi</i>
<i>Plasmodium ovale</i>	

### Cervical Cancer Screening

#### M5FHPV-DG

- **ScreenFire Digital HPV RS Kit** | Quantifies 13 HPV genotypes with identification of HPV16, HPV18/45, HPV31/33/35/52/58, and HPV39/51/56/59/68 in groups for risk stratification related to cancer caused by these high-risk HPV genotypes. (RUO)

#### MHPVF1618-DG

- **AmpFire Digital HPV Screening 16/18/HR** | Quantifies 14 types of high-risk HPV and simultaneously genotypes HPV 16 and HPV 18. (RUO)

#### GHPVF-DG

- **AmpFire Digital HPV High-Risk Genotyping** | Quantifies 15 high-risk Human Papillomavirus (HPV) genotypes (16, 18, 31, 33, 35, 39, 45, 51, 52, 53, 56, 58, 59, 66, 68). (RUO)

### Monkey Pox Assay

#### MPX-DG

- **AmpFire Digital Monkeypox Assay** | Quantifies Monkeypox virus (MPXV) in subtypes from the West African clade and the Congo Basin (Central African) clade. (RUO)

## Extraction Free Digital PCR Assays

### Sexually Transmitted Infections (STI) Assays

#### *iAMP-TP-DG*

- **Digital Syphilis Detection Kit** | Quantifies *Treponema pallidum subspecies pallidum*. (RUO)

#### *iAMP-CT-DG*

- **Digital CT Detection Kit** | Quantifies *Chlamydia trachomatis* (CT) in urogenital or ocular swab or urine specimens. (RUO)

#### *iAMP-4STI-DG*

- **Digital CT/NG/TV/MG Detection Kit** | Simultaneously quantifies *Neisseria gonorrhoeae*, *Chlamydia trachomatis*, *Trichomonas vaginalis*, *Mycoplasma genitalium*. (RUO)

#### *iAMP-HSV-DG*

- **Digital HSV 1/2 Detection Kit** | Quantifies Herpes Simplex Virus 1 & 2. (RUO)

#### *iAMP-GBS-DG*

- **Digital Group B Streptococcus Detection Kit** | Quantifies Group B Streptococcus (GBS). (RUO)

#### *iAMP-MH-DG*

- **Digital Mycoplasma hominis Detection Kit** | Quantifies *Mycoplasma hominis*. (RUO)

#### *iAMP-UUUP-DG*

- **Digital Ureaplasma Detection Kit** | Quantifies *Ureaplasma parvum* (UP) and *Ureaplasma urealyticum* (UU). (RUO)

#### *iAMP-CAN-DG*

- **Digital Candidiasis Detection Kit** | Quantifies six *Candida* species (*C. albicans*, *C. tropicalis*, *C. parapsilosis*, *C. dubliniensis*, *C. glabrata*, *C. krusei*), with specific identification of *C. glabrata* and *C. krusei*. (RUO)

#### *iAMP-BV-DG*

- **Digital Bacterial Vaginosis Detection Kit** | Quantifies *Gardnerella vaginalis*, *Atopobium vaginae*, *BVAB-2*, *Megasphaera-1*, and *Megasphaera-2*. (RUO)

#### *iAMP-VAG-DG*

- **Digital Vaginal Panel** | Quantifies bacterial vaginosis, candidiasis, and trichomoniasis. (RUO)

### Women's Health Panel

The Atila Digital Women's Health Panel (ATWH) consists of an internal control assay targeting human cells and 7 different quantification kits for bacterial and fungal pathogens commonly found in women's genitalia and urine. **ATWH includes 6 of the below targets and can be ordered in any combination.** (RUO)

*ATWH-IC-DG*

*ATWH-4STI-DG*

*ATWH-HSV-DG*

*ATWH-MH-DG*

*ATWH-UUUP-DG*

*ATWH-BV-DG*

*ATWH-CAN-DG*

## Extraction Free Digital PCR Assays

### Respiratory Analysis

#### *iAMP-COVID19-DG*

- **Digital Covid-19 Detection Kit (RUO)**

#### *iAMP-COVSANO-DG*

- **Digital Covid-19 SANO Assay** | Quantifies RNA and later cDNA from the N and ORF-1ab genes of the SARS-CoV-2 virus in swab or saliva specimens. (RUO)

#### *iAMP-COVFLU-DG*

- **Digital COV2/INF Detection Kit** | Quantifies SARS-CoV-2, Influenza A, and Influenza B in a single reaction. (RUO)

#### *iAMP-INFRSV-DG*

- **Digital INF/RSV Detection Kit** | Quantifies Influenza A, Influenza B, and Respiratory Syncytial Virus (RSV) in a single reaction. (RUO)

#### *iAMP-COVFLURSV-DG*

- **Digital COV/FLU/RSV Detection Kit** | Enables simultaneous quantitative detection SARS-CoV-2, Influenza A, Influenza B, and RSV. (RUO)

#### *iAMP-GAS-DG*

- **Digital Group A Streptococcus Detection Kit** | Quantifies *Streptococcus pyogenes*. (RUO)

#### *iAMP-RPP-DG*

- **Digital Respiratory Panel** | Quantifies 19 common bacterial and viral pathogens responsible for respiratory infections. (RUO)

<i>Respiratory syncytial virus</i>	<i>Human metapneumovirus</i>
<i>Influenza A</i>	<i>Mycoplasma pneumonia</i>
<i>Influenza B</i>	<i>Klebsiella pneumonia</i>
<i>SARS-CoV-2</i>	<i>Bordetella parapertussis</i>
<i>Rhinovirus</i>	<i>Bordetella pertussis</i>
<i>Enterovirus</i>	<i>Streptococcus pneumonia</i>
<i>Coronavirus (229E, HKU1, OC43, NL63)</i>	<i>Haemophilus influenzae</i>
<i>Parainfluenza virus (1-4)</i>	<i>Legionella pneumophila</i>
<i>Human adenovirus</i>	<i>Chlamydia pneumonia</i>
	<i>Human bocavirus</i>

### Respiratory Analysis

#### *iAMP-RSV-DG*

- **iAMP RSV Detection Kit** | Quantifies RSV A and RSV B. (RUO)

#### *MTB-RUO-DG*

- **AmpFire Digital MTB Assay** | Quantifies *Mycobacterium tuberculosis* (MTB), *Mycobacterium bovis*, *Mycobacterium africanum*, *Mycobacterium canettii*, and *Mycobacterium microti*. (RUO)

#### *iAMP-H5N1-DG*

- **Digital H5N1 Detection Kit** | Quantifies both Hemagglutinin (H5 gene) and Neuraminidase (N1 gene) of H5N1. (RUO)

# NGS Solutions

- NGS Target Enrichment for Oncology

## Workflow

Step 1



Targeted Amplicon  
Amplification and Amplified  
Product Purification Steps

Step 2



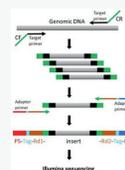
Add Sequencing  
Adaptor &  
Amplification

Step 3



Library Purification  
**(Library Ready in  
Less Than 3 Hours)**

Step 4



Illumina Sequencing

Step 5



Data Analysis

## NGS Solutions

### NGS Target Enrichment for Oncology

#### ACPN-HT-100

- **HotSpot Cancer Panel Sequencing Library**

**Preparation** | Targets amplicon regions of more than 50 cancer related genes, including *BRAF*, *KRAS*, and *EGFR* etc, and detects more than 2700 cancer mutation hotspots. (CE-IVD)

#### ACPN-LN-100

- **Lung Cancer Panel Sequencing Library**

**Preparation** | Targets 138 amplicon regions of 24 genes, including *AKT1*, *ALK*, *BAP1*, *BRAF*, *CCDC6*, *EGFR*, *EML4*, *ERBB2*, *FGFR2*, *KDR*, *KRAS*, *LRIG3*, *MAP2K1*, *MAP2K2*, *MYCL1*, *NFE2L2*, *RB1*, *RET*, *ROS1*, *SLC34A2*, *SMARCA4*, *STK11*, *TFG*, *TP53*. (CE-IVD)

### NGS Target Enrichment for Oncology

#### ACPN-BR-100

- **Breast Cancer Panel Sequencing Library**

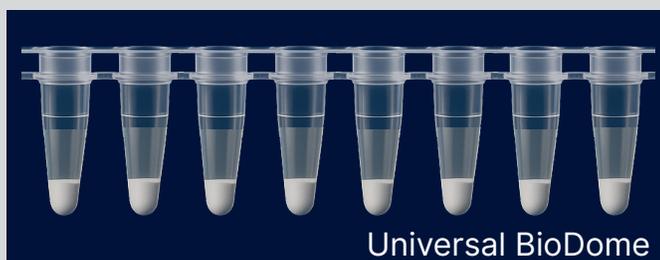
**Preparation** | Targets 139 amplicon regions of 16 genes, including *AKT1*, *BAP1*, *BRCA1*, *BRCA2*, *BRIP1*, *CCND1*, *CHEK2*, *EP300*, *ERBB2*, *GATA3*, *MAP2K4*, *PALB2*, *PBRM1*, *PIK3CA*, *RB1*, and *TP53*. (CE-IVD)

#### ACPN-CR-100

- **Colorectal Cancer Panel Sequencing Library**

**Preparation** | Targets amplicon regions of 21 Colorectal cancer related genes, including *AKT1*, *APC*, *AXIN1*, *BRAF*, *CTNNB1*, *EP300*, *FBXW7*, *KRAS*, *MAP2K1*, *MAP2K4*, *MDM2*, *MLH1*, *MSH2*, *MSH6*, *MUTYH*, *PIK3CA*, *PIK3R1*, *PMS1*, *PMS2*, *TCF7L2*, and *TP53* etc. (CE-IVD)

# Atila Consumables and Instrumentation



Power-Gen 9600 Plus  
Real-Time PCR Equipment



iAMP Personal Station  
Real-Time PCR System



iAMP Automatic Instrument



Nucleic Acid Extraction  
System

## Atila Consumables

### *PS96-QDS-200*

- **iAMP-PS96 dsDNA Quantification Kit** | Quantifies double stranded DNA (dsDNA). iAMP-PS96 processes up to 94 samples simultaneously and delivers results in 5 minutes. (RUO)

### *BioDome-UP-96-10*

- **Universal BioDome 96-Well PCR Plates** | Prevents lab contamination, 10 Plates per Pack. (RUO)

### *BioDome-UP-384-10*

- **Universal BioDome 384-Well PCR Plates** | Prevents lab contamination, 10 Plates per Pack. (RUO)

### *BioDome-UST-10*

- **Universal BioDome PCR Strips with Caps** | Prevents lab contamination, 120 Strips per Kit. (RUO)

### *iAMP-COVID19-SCD*

- **iAMP COVID-19 Sample Collection Package** (Nasopharyngeal and/or Oropharyngeal), 100 Samples per Pack. (FDA-EUA, CE-IVD)

### *iAMP-COVID19-SSD*

- **iAMP COVID-19 Saliva Sampling Device**, 100 Samples per Pack. (CE-IVD)

### *AMPF-DS*

- **Self-Sampling Collection Packages** | Designed for Cervical Cancer Screening. (CE-IVD)

### *ATILA-BCT-50*

- **cfDNA Blood Collection Tube**, 50 samples per pack. (RUO)

## Atila Instrumentation

### *Ati-Pure32*

- **Atila Nucleic Acid Extraction System (Magnetic Beads-Based)** (CE-IVD)

### *B200-32*

- **Nucleic Acid Extraction Kit (Magnetic Bead Method, Automated)** (RUO)

### *D200-32*

- **Nucleic Acid Extraction Kit (Magnetic Bead Method, Manual)** (RUO)

### *Ati-Pure24*

- **Atila cfDNA Extraction System (Magnetic Beads-Based)** (RUO)

### *ATILA-cf50*

- **cfDNA Extraction Kit (Manual)** (RUO)

### *ATILA-cf50-auto*

- **cfDNA Extraction Kit (Automated)** (RUO)

### *iAMP-PS96*

- **iAMP Personal Station Real-Time PCR System** | Designed for isothermal real-time detection and fluorescence plate reading. Features a 96-sample capacity and five fluorescent channels (FAM, HEX, ROX, Cy5, Cy5.5). (CE-IVD) Additionally, can be used for DNA Quantification. (RUO)

### *Power96-1*

- **Power-Gene 9600 Plus Real-Time PCR Equipment** | Supports both isothermal and PCR real-time detection with five fluorescent channels (FAM, HEX, ROX, Cy5, Cy5.5). (CE-IVD)

### *iAMP-AI*

- **iAMP Automatic Instrument** | Enables high-throughput isothermal real-time detection with five fluorescent channels (FAM, HEX, ROX, Cy5, Cy5.5). (*under development*)

**Contact Us Today!**

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