



- DNA FLOW TECHNOLOGY -

A large, semi-transparent blue DNA double helix structure is positioned diagonally across the upper half of the image. Below it, several white circular microarray chips are arranged on a light-colored surface. Each chip contains a grid of small, dark spots representing individual data points or genes.

MOLECULAR DIAGNOSIS KITS
BASED ON MULTIPLEX PCR AND MACROARRAY CHIP

- DNA FLOW CHIP -



MULTIPLEX
PCR SYSTEM
LYOPHILIZED FORMAT



RAPID
RESULT



NO DNA
EXTRACTION

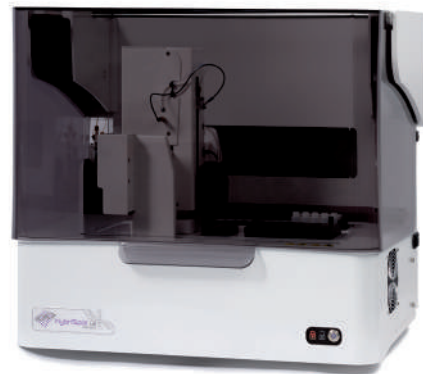
- AVAILABLE PLATFORMS -

HS12 - MANUAL PLATFORM



- Hybridization from 1 to 12 samples per run

HS12 AUTO- FULLY AUTOMATED PLATFORM



- **Amplification**
- Denaturation
- Hybridization
- Amplification from 1 to 24 samples per run
- Hybridization from 1 to 12 samples per run
- UV Decontamination

HS24- SEMIAUTOMATIC PLATFORM



- Denaturation
- Hybridization
- Hybridization from 1 to 24 samples per run
- UV Decontamination

COMMON CHARACTERISTICS

- Economic
- Robust and compact
- Fast, sensitive and accurate in diagnosis
- Equipped with thermostatic chambers and vacuum pumps
- Automatic analysis of results- hybriSoft Software

- HPV DIRECT FLOW CHIP -

Simultaneous detection and genotyping of **35 HPV genotypes**



- ✓ Liquid- based cytology
- ✓ Cytological swabs
- ✓ Paraffin- embedded samples



No DNA extraction

High Risk:

16, 18, 26, 31, 33, 35, 39, 45, 51, 52, 53, 56, 58, 59, 66, 68, 73 y 82

Low Risk:

6, 11, 40, 42, 43, 44, 54, 55, 61, 62, 67, 69, 70, 71, 72, 81 y 84

B	33	58	42	71	16	52	B	
B	35	59	43	72	18	53	6	69
C	39	66	44/55		26	56	11	70
U	45	68	54	84	31	58	40	71
16	51	73	61	B	33	59	44/55	72
18	52	82	62/81	C	35	66	54	
26	53	6	67	U	39	68	61	84
31	56	11	69	42	45	73	62/81	
	B	40	70	43	51	82	67	

- STD DIRECT FLOW CHIP -

Simultaneous detection of **12 STD-related pathogens**



- ✓ Urine
- ✓ Semen
- ✓ Endocervical swabs
- ✓ Pharyngeal swabs
- ✓ Perianal swabs
- ✓ Urethral swabs
- ✓ Liquid cytology
- ✓ Vaginal swabs



No DNA extraction

Organism

Mycoplasma genitalium
Mycoplasma hominis
Trichomonas vaginalis
Ureaplasmas (U. urealyticum / U. parvum)
Haemophilus ducreyi
Herpesvirus simplex type 1/ Herpesvirus simplex type 2
Herpesvirus simplex type 2
Treponema pallidum
Neisseria gonorrhoeae
Chlamydia trachomatis (Serovares A-K)
Chlamydia trachomatis (Serovares: A-L3)

B	MG				CTS-1		B	
B		MH				CTS-2		
CI	TV		UU-P		MG		UU-P	
BG		HD				MH		
	HSV-1/ HSV-2		NG	B	TV		NG	
		HSV-1		CI		HD		
	CTS-1		TP	BG	HSV-1/ HSV-2		TP	
		CTS-2				HSV-1		
	B							

- SEPSIS FLOW CHIP -

Simultaneous detection of **36 bacterial species** Gram positive and Gram negative, **fungus and 20 antibiotic resistance genes**



- ✓ Blood cultures
- ✓ Rectal exudates
- ✓ Bacterial colonies



No DNA
extraction

Organism / Resistance

Streptococcus pneumoniae
Streptococcus pyogenes
Stenotrophomonas maltophilia
Candida spp.
Acinetobacter baumannii
Serratia marcescens
Klebsiella pneumoniae
Streptococcus agalactiae
Coagulase- negative staphylococcus
Staphylococcus aureus
Escherichia coli
Enterobacteria

B		LIS	kpc	spm		ECOLI	vanB		B
B	ABAU	ENTEROC	sme	ndm		ENTEROB	vanA	ges	oxa23
CI	SMAR/ KLEB	PAER	nmc/imi	sim			mecA	vim	oxa24
BG	SAGAL	KLEB	SPYOG	imp	SMALTO	CALB		gim	oxa48
	STAPHYL	STREP	blaSHV		CAND		PROT/ MOR	kpc	oxa51
SPENU	SA	NEISS	blaCTX		B	ABAU	LIS	spm	oxa58
	ECOLI	PROT/ MOR	ges	oxa23	CI	SMAR/ KLEB	ENTEROC	sme	ndm
SMALTO	ENTEROB		vim	oxa24	BG	SAGAL	PAER	mmc/imi	sim
CAND		mecA	gim	oxa48		STAPHYL	KLEB	SPYOG	imp
	CALB	vanA		oxa51	SPNEU	SA	STREP	blaSHV	
	B	vanB		oxa58			NEISS	blaCTX	

Organism / Resistance

Candida albicans
Listeria monocytogenes
Enterococcus spp.
Pseudomonas aeruginosa
Streptococcus spp.
Neisseria meningitidis
Proteus spp.
Morganella morganii
Methicillin resistance gene mecA
Vancomycin resistance gene vanA
Vancomycin resistance gene vanB
Class A carbapenemase KPC
Class A carbapenemase SME
Class A carbapenemase NMC/IMI

Organism / Resistance

β-lactamasa SHV
Extended- spectrum β- lactamase CTX-M
Class A carbapenemase GES
Class B carbapenemase VIM
Class B carbapenemase GIM
Class B carbapenemase SPM
Class B carbapenemase NDM
Class B carbapenemase SIM
Class B carbapenemase IMP3, 15, 19_like
Class D carbapenemase OXA23_like
Class D carbapenemase OXA24_like
Class D carbapenemase OXA48_like
Class D carbapenemase OXA51_like
Class D carbapenemase OXA58_like

- AMR DIRECT FLOW CHIP -

Simultaneous detection of **20 antibiotic resistance genes** present in Gram-positive and Gram-negative bacteria



- ✓ Blood cultures
- ✓ Rectal exudates
- ✓ Nasopharyngeal exudates/aspirates
- ✓ Bacterial colonies
- ✓ Rectal and nasal exudates as a single sample



No DNA extraction

Organism / Resistance

Staphylococcus aureus
 Methicillin resistance gene mecA
 Vancomycin resistance gene vanA
 Vancomycin resistance gene vanB
 Class A carbapenemase KPC
 Class A carbapenemase SME
 Class A carbapenemase NMC/IMI
 β-lactamase SHV
 Single β-lactamase SHV mutants

Organism / Resistance

Double β-lactamase SHV mutants
 Extended- spectrum β- lactamase CTX-M
 Class A carbapenemase GES
 Class B carbapenemase VIM
 Class B carbapenemase GIM
 Class B carbapenemase SPM
 Class B carbapenemase NDM

B			kpc	spm			vanB	blaSHV-S	B
B			sme	ndm			vanA	ges	oxa23_like
CI			nmc/imi	sim			mecA	vim	oxa24_like
BG				imp_like				gim	oxa48_like
			blaSHV	blaSHV-S				kpc	oxa51_like
	SA		blaCTX	blaSHV-SK	B			spm	oxa58_like
			ges	oxa23_like	CI			sme	ndm
			vim	oxa24_like	BG			nmc/imi	sim
		mecA	gim	oxa48_like				blaSHV-SK	imp_like
		vanA		oxa51_like		SA		blaSHV	
	B	vanB		oxa58_like				blaCTX	

Organism / Resistance

Class B carbapenemase SIM
 Class B carbapenemase IMP3, 15, 19_like
 Class D carbapenemase OXA23_like
 Class D carbapenemase OXA24_like
 Class D carbapenemase OXA48_like
 Class D carbapenemase OXA51_like
 Class D carbapenemase OXA58_like

- BACTERIAL CNS FLOW CHIP -

Simultaneous detection of **bacteria and fungus** causing CNS infections. Purified DNA from cerebrospinal fluid (CSF)



- ✓ Purified DNA from cerebrospinal fluid (CSF)

Organism

Mycobacterium tuberculosis complex

Streptococcus pneumoniae

Streptococcus agalactiae

Haemophilus influenzae

Listeria monocytogenes

Treponema pallidum

Neisseria meningitidis

Coxiella burnetii

Borrelia burgdorferi

Cryptococcus neoformans (fungus)

B							B	
B							MTB	
CI	NEISS	AGAL	TPA		LIS	CRYP	BOR	
BG								
	SPNEU	HINF	COX	B	NEISS	AGAL	TPA	
				CI				
	LIS	CRYP	BOR	BG	SPNEU	HINF	COX	
	MTB							
	B							

- TICK-BORNE BACTERIA FLOW CHIP -

Simultaneous detection of **the main bacterial species from 7 different genera**



- ✓ DNA purified from serum
- ✓ DNA purified from biopsies
- ✓ DNA purified from blood
- ✓ DNA purified from cerebrospinal fluid
- ✓ DNA of arthropods carrying the bacteria of interest
- ✓ Samples of animal reservoirs

Bacteria

Rickettsia

Rickettsia Typhus Group

Rickettsia Spotted Fever Group

Ehrlichia

Anaplasma

Francisella

Bartonella

Borrelia

Coxiella

B			FR				B	
B	GR				EH		BOR	
CI	TG		BAR		AN			
BG	SFG						COX	
			BAR-2	B				FR
				CI				
	EH		BOR	BG	GR			BAR
	AN				TG			BAR-2
	B		COX		SFG			

- RESPIRATORY FLOW CHIP -

Respiratory Flow Chip identifies the **main infectious agents causing acute respiratory diseases, including SARS-CoV-2**



- ✓ Purified DNA+RNA from:
- ✓ bronchoalveolar lavage
- ✓ nasopharyngeal swabs

Organism

Influenza virus A
Influenza virus A H1N1 2009
Influenza virus A H3
Influenza virus B
Human metapneumovirus
Respiratory syncytial virus A
Respiratory syncytial virus B
Rhinovirus
Enterovirus
Human parainfluenza virus type 1
Human parainfluenza virus type 2
Human parainfluenza virus type 3
Human parainfluenza virus type 4
Adenovirus
Bocavirus
Human coronavirus 229E
Human coronavirus HKU1
Human coronavirus OC43

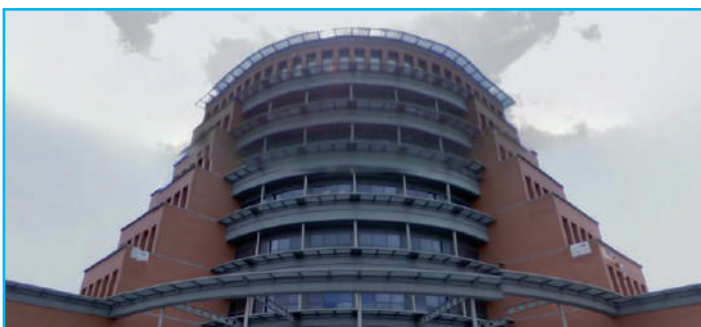
B	FluA	PIV-1	CoV-OC43		RNaseP	RSV-A	B	
B	FluA-H1N1	PIV-2	BP		BG	RSV-B	CoV-229E	
CI-1	FluA-H3	PIV-3	BPP			RhV	CoV-HKU1	
CI-2	FluB	PIV-4	MP			PIV-1	CoV-NL63	
RNaseP	MPV	AdV	EV	B	FluA	PIV-2	BPP	
BG	RSV-A	Bov	CoV-2	CI-1	FluA-H1N1	PIV-3	MP	
	RSV-B	CoV-229E	SARS	CI-2	FluA-H3	PIV-4	EV	
	RhV	CoV-HKU1		CoV-OC43	FluB	AdV	CoV-2	
	B	CoV-NL63		BP	MPV	Bov	SARS	

Organism

Human coronavirus NL63
Bordetella pertussis
Bordetella parapertussis
Mycoplasma pneumoniae
Human coronavirus SARS-CoV-2

- ORDERING / CONTACT -

For detailed information about all our solutions **please contact us:**



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