



IMMUNOASSAY SYSTEM



A3



A1

SEROLOGY TEST
IgG & IgM SARS COV-2

TOTAL LABORATORY AUTOMATIC SYSTEM



Simple Sample Test



Simple Operations



Simple Preparations

Ruko Graha Permata Surya 14-15
Jl. Kahuripan Ngadirgo Mijen Semarang

PT. Mandiri Karya Medika
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• OPERATION Accuracy and simplicity



3 Key Technologies **INNOVATION**

Automated platform

- Multiple test methodologies intergration
- Automatic laboratory platform
- International reagent

Full-function module

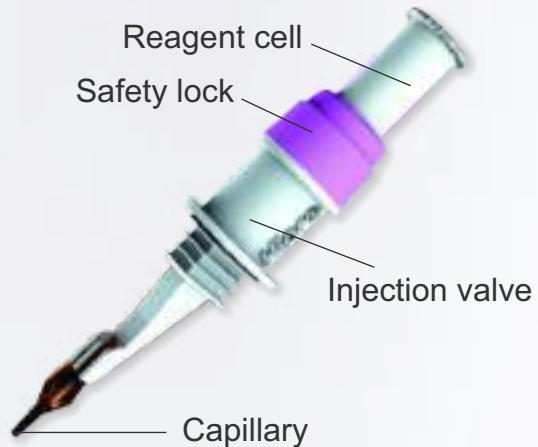
- Single module capable of all functions combination of 1-48 modules
- Appropriate for laboratories of all sizes
- Scalability for cost savings

3-level Calibration system

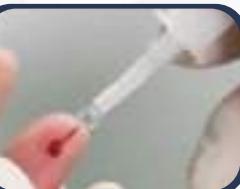
- Physical calibration by standard liquid traced to ANSI
- Remote standart curve calibration
- System calibration by custom quality control supplied by Bio-Rad

• QUALITY

RSP-USA is going through JCTLM review. Hipro is to become a JCTLM laboratory. The Hipro assays and control system are certified by ANSI in Aug, 2013, Accredited by (CNAS) ISO17025 and ISO15195 can expected soon.



• SIMPLE OPERATION



1. Collect Sample



2. Insert into Cuvette



3. Insert into Channel



3 Key Technologies **INNOVATION**

Build-in Battery

Charge 3Hr, Run 30Hr non-stop

3-level Calibration System

Assure reliable and accurate results

Multi-methodologies

Reagent platform sharing

• Technical Support

Dimensions		Applicable Methodologies
W x D x H	410 * 355 * 280 mm	Biochemistry
Weight	5kg	Nephelometry
Operation		Turbidimetry
Power supply	AC 110-265 V	Immufluorescence
Sample test time	< 5 minutes	Calibration
Patient input	Barcode, RFID	Hardware calibration
Quality Control		Network calibration
Storage the newest reagents' curves updated by network connection to host server		Third party calibration

CAT.	Parameter	Principle	Sample Type	Sample Size	Test Time	Reference Range	Linearity Range	Clinical Application
Infection	Full range CRP	Nephelometry	Whole Blood	2.5µl	90S	<10mg/L	0,5~200mg/L	Disreminate bacteria and virus infection.
	Procalcitonin (PCT)	Nephelometry	Serum	20µl	480S	<0.5ng/mL	0,2~60ng/mL	Sepsis, antibiotics monitoring.
Cardiovascular	D-Dimer	Nephelometry	Plasma	15µl	180S	<1.35mg/L	0.5~20mg/L	Early diagnostic for DIC, DVT screening, PE diagnostic, thrombolytic therapy monitoring
Renal Function	Hemoglobin A1c (HbA1c)	Nephelometry	Whole Blood	10 µl	300S	3.8-5.8%	2~14%	Gold standard for detecting diabetes
Serology	Sars-COV-2 (Covid-19)	Nephelometry	Serum/ Plasma	10µl	300S	Positive > 48 µg/mL Negative ≤ 48 µg/mL	10~600 µg/mL	This product is Used for the qualitative detection of 2019-nCoV antibodies in human serum or plasma

• Comparison Results Hipro IgG & IgM Sars Cov-2

Reactive sample comparison Sars Cov-2

Hipro A1(Nephelometry Method) with (Eclia Method)

ECLIA (COI)		HIPRO A1 (µg/mL)	
Positive Sample	Negative Sample	Positive Sample	Negative Sample
9.27	0.063	262.2	13.8
34	0.069	> 600	14.1
48.40	0.061	311.3	32.2
12.86	0.060	157.1	14.9
93.54	0.061	571.1	39.9
19.21	0.059	199.9	22.9
16.05	0.062	100.1	48.0
191.9	0.078	> 600	18.7
154.5	0.063	410.3	24.7
14.52	0.064	84	15.4
176.6		>600	
3.14		49.5	
8.53		49.9	
19.48		245.9	

Normal Value :

ECLIA :

>1.0 COI (Reactive Result)
<1.0 COI (Non-Reactive Result)

NEPHELOMETRY :

> 48 µg/mL (Reactive Result)
< 48 µg/mL (Non-Reactive Result)

Performance :

Sensitivity 90%

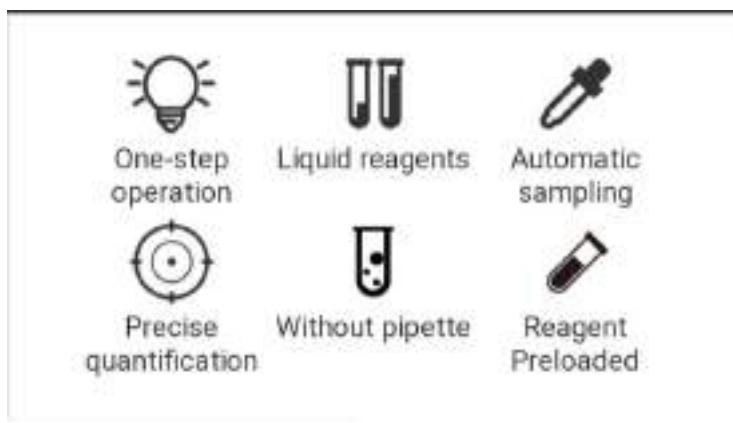
Specificity 95%





Parameter Test

Infection	Cardiovascular disease	Reheumatism
PCT	H-FABP	ASO
Full range CRP	MYO	CRP
SAA	cTnI	Anti-CCP
Renal Function	HCY	RF
HbA1C	NT-ProBNP	Autoimmunity
CYS-C	Lp(a)	IgA
mAlb	Lp-PLA2	IgG
NGAL	CK-MB	IgM
RBP	D-Dimer	IgE
β2-MG	Gastric Function	Hormones
α1-MG	★ HP	HCG
Microelement	PGI	★ LH
25-OH-VD	PGII	Thyroid Function
Liver Function	Tumor Marker	★ T3
ADA	AFP	★ T4
TRF	CEA	★ TSH
PA	★ PSA	★ FT3
★ HPT	★ fPSA	★ FT4



Daftar Pengguna Alat Hipro

SURABAYA	
RS ADI HUSADA KAPASARI	MALANG
RS MITRA HUSADA	RS WAFA
RS RAHMAN RAHIM	RS LAWANG MEDIKA
RS AISYIAH TULANGAN	RSIA MITRA DELIMA
RS MUJI RAHAYU	RS BAYANGKARA HASTA BRATA BATU
LAB BIOGEN	RS BAPTIS BATU
LAB KENCANA MEDIKA	RS UNIVERSITAS MUHAMMADIYAH MALANG
LAB SPEKTRUM	RS UNIVERSITAS BRAWIJAYA MALANG
MOJOKERTO	
RS HASANAH	PANDAAN
RS EMMA	RS MITRA SEHAT PANDAAN
RS REKSO WALUYO	RS SAHABAT
KUDUS	KEDIRI
RSA KUDUS	RS SITI KHODIJAH
JOGJAKARTA	RS AMELIA
LAB PRIMA	JOMBANG
SIDOARJO	RS PELENGKAP
RS DKT	RS AIRLANGGA
NGANJUK	Tulungangung
RS BAYANGKARA NGANJUK	LAB ULTRA MEDIKA
RSUD NGANJUK	RS PUTRA WASPADA
MAGETAN	RSUD dr, ISKAK
RSIA BHAKTI PERSADA	LAB SAM HUSADA
MADIUN	RS SATITI PRIMA HUSADA
LAB MERAH PUTIH	BLITAR
LUAR JAWA	RSU AMINAH
RS KASIH HERLINA TIMIKA	RSUD NGUDI WLINGI
KLINIK BORMED KALTIM	
MANADO MEDICAL CENTER	RSI Muhammadiyah Kendal RS Baitul Hikmah Kendal RSUD Sunan Kalijaga Demak RS BANYUMANIK