

PREFERRED PROVEN!

JCDC In-Vitro Research Laboratory

JCDC Laboratory has a Real-Time Cell Monitoring System, which allows label-free, cost-effective and real-time monitoring of cellular processes such as cell proliferation, cytotoxicity, adhesion, viability, invasion, and migration, using electronic cell sensor array technology.

Advantages over the conventional end-point assay:

- · Real time platform
- · Enables label-free monitoring
- · Enables to look at cell growth phenotypes
- Continuous monitoring normally missed by single endpoint assays
- Complete & continuous data profiles from shortterm (minutes) to long-term (days) cell responses
- Analysis of effects of drugs without exogenous labels that invade and disrupt the natural cell environment.
- Powerful cell analysis software (dose response curves, IC50 / EC50 calculation, data normalization, slope, & doubling time)

Cell-based assays for both high throughput screening and

- Compound-mediated Cytotoxicity/ Apoptosis
- · Cell Invasion and Migration
 - Cancer Research, Immunology, Stem Cell Research, Toxicology (cytotoxicity of agents & effects of cytokine release), etc.
- · Cell-mediated Cytotoxicity
- · Cell Adhesion and Cell Spreading
- · Carcinogenicity and mutagenicity assays
- · Receptor-mediated Signalling
 - Receptor tyrosine kinase activation Nuclear Hormone Receptor Signalling

 - GPCR Signalling
- Virus-mediated
- Endothelial Barrier Function
- · NK cell-mediated cytolysis







Molecular Diagnostics

A stratified approach to diagnostics Applications in molecular microbiology, molecular genetics and molecular oncology.

Pathogen Detection

- Through nucleic acid (DNA/RNA) analysis
- Offers rapid & sensitive detection of viral, bacterial & protozoan pathogens
- · Broad range of sample types (sputum, urine, swabs etc)

GenoType MTBDRplus

- · Identification of the M. tuberculosis complex and its resistance to Rifampicin and/or Isoniazid
- · From pulmonary clinical specimens (microscopic AFB positive or negative) or cultivated samples
- Diagnosing patients after treatment failure and relapse

Infectious Disease profile Metabolic markers **HLA** typing

Enzyme-Linked Immune Sorbent Assay (ELISA)

Immunogenicity assays: Identification of monoclonal antibodies and neutralizing antibodies for biosimilars

Biomarkers

- Autoimmune Disease
- Anaemia
- · Bone Disease
- · Cardiac Markers
- Infectious Disease
- Metabolic Markers

