# **OmniLog®**

## automated incubator-reader

Kinetic cell assays 4800 at-a-time

- Metabolic rate assays
- Growth curves
- Chemosensitivity assays
- Incubation and reading in a single instrument
- 50 microplate capacity
- Flexible incubation temperature

Biolog's OmniLog enables high throughput, automated kinetic cell assays on 50 microplates (4,800 wells) at a time. The instrument can be used with Biolog's preconfigured PM phenotypic assay panels or with any other colorimetic assays. Microplates are read in place. They do not have to be moved to a reader and the lids do not have to be removed during reading, preserving sterile incubation conditions.





### Open the door to new possibilities

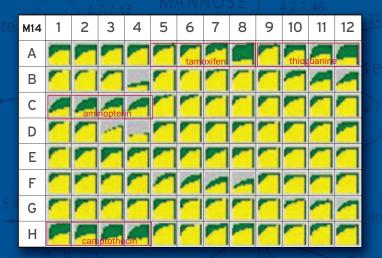
#### Automated incubation and reading

Microplates are easily and quickly loaded onto the 25 shelves, the door is closed, and the on-board OmniLog software takes over, controlling the incubation temperature, read frequency, and recording all data into e-files for subsequent analysis. The software allows various data displays, kinetic parameterization of data for slope, lag, maximum, area under the curve, etc. Data is also exportable to other file formats such as Excel® and Access® (products of Microsoft Corporation).

#### **Automated metabolic rate assays**

Using Biolog Phenotype MicroArray (PM) metabolic panels (e.g., PM-M1 to PM-M4), metabolic rates of cellular carbon/energy and nitrogen substrates can be measured on diverse cells including bacteria, fungi, human and other animal cell lines, stem cells, and primary cells. The data to the right shows differential utilization rates of carbon/energy substrates by primary rat hepatocytes.

M 1	1	2	3	4	5	6	7	8	9	10	11	12
Α						glycogen			maltose			
В	G6P	G1P		glucose	glucose	glucose					sorbitol	
С					mannose							turanose
D							fructose					
Ε			galactose									
F	adonitol				xylitol							
G		lactate			pyruvate				methyl succinate			
Н	aceto acetate	γ-amino butyrate	α-keto butyrate	α-hydroxy butyrate	ß-hydroxy butyrate	γ-hydroxy butyrate					acetate	hexanoate
	A B C D F	A B C D E F adonitol G G acceto	A B GGP GIP C D F adonitol F adonitol G accto y-amino	A B GEP GIP C D E Galactose F adonitol Galactate G accto y-amino coketo	A B GEP GIP glucose C D Glactate F adonitol lactate G lactate G cketo G-hydroxy	A B GEP GIP glucose glucose C mannose D galactose F adonitol y-amino cyketo chydroxy 8-hydroxy	A glycogen  B GeP GIP glucose glucose glucose  C mannose  D galactose  F adonitol solution galactose  G lactate pyrruvate  glycogen  mannose  purpose  glycose  glucose  glycose  glyco	A	A glycogen  B GSP GIP glucose glucose glucose  C mannose  D fructose  E galactose  F adonitol yamino oketo okydroxy (8-hydroxy y-hydroxy)	A glycogen maltose  B GSP GIP glucose glucose glucose  C mannose  Tructose  F adonitol such actate pyrruvate such actate such actate pyrruvate such actate such actates	A glycogen maltose  B GGP GTP glucose glucose glucose  C mannose  Tructose  F adonitol sylitol glucose  G lactate pyruvate methyl succinate  aceto y-amino Q-keto Q-hydroxy (8-hydroxy y-hydroxy)	A glycogen maltose  B GGP GTP glucose glucose glucose  C mannose  fructose  F adonitol  A sylitol  A sylitol



#### **Automated anti-cancer drug assays**

Using Biolog Phenotype MicroArray panels PM-M10 to PM-M14, automated chemosensitivity assays can be performed easily and accurately with 92 cytotoxic anticancer drugs. The combination of the OmniLog instrument with Biolog's novel redox dye chemistries can be employed in simple colorimetric assays of diverse combinations of cells with biologically active chemicals.

Plus many other assay capabilities .

