

The Total Solution to Population Analysis with the FMBIO®

Do You Need Higher Throughput in Your Population Analysis?

The FMBIO Fluorescence Imaging System with its large scanning area, high sensitivity, 4-color capability and powerful analysis software offers the total solution to all your genotyping needs. Successful population studies require a robust sample size, multiple markers and flexible data analysis. While PCR techniques are easily modified to accommodate high throughput needs, a common laboratory bottleneck lies in gel electrophoresis and analysis.



High-Throughput Electrophoresis

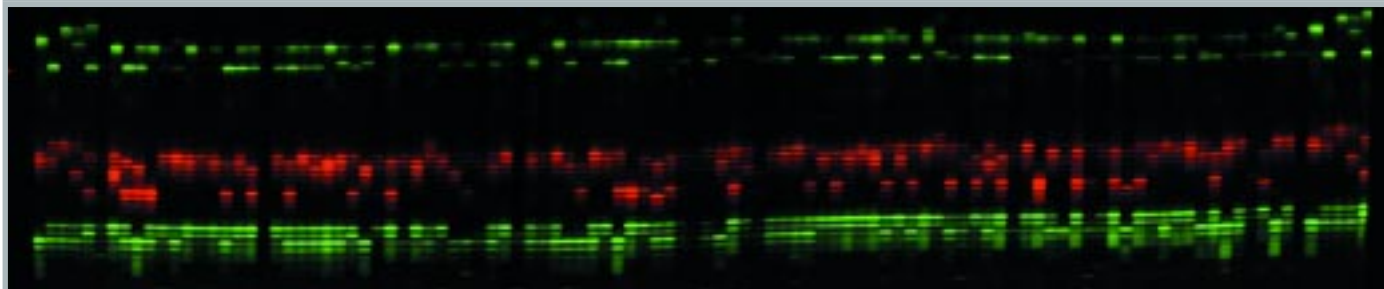
Our wide-format electrophoresis units offer unparalleled performance and sample throughput. The dual-sided JumboGel™ allows for processing of up to 132 samples per gel, for a total of 264 samples. Gel “smiling” is minimized by epoxy-coated aluminum heat-dispersion plates. Bar clamps evenly compress the glass plates, providing equal pressure along the entire comb length, which virtually eliminates sample leakage. The apparatus sits on a rotating base, making multiple gel loading easy and uses a minimum of bench space. The patented MicroTrough™ system offers unparalleled ease and speed of gel loading, allowing 132 lanes to be loaded with standard pipette tips in under three minutes.

The JumboGel Electrophoresis Unit



The JumboGel™ is a dual-sided, 47 x 28 cm rotating electrophoresis apparatus with independent buffer chambers capable of running up to 264 samples with ease.

96 multiplexed samples can be loaded in three minutes when run on the JumboGel™



Data graciously provided by Dr. D. Hedgecock at the U.C. Davis, Bodega Marine Laboratory.

Population Analysis Module

Our latest software module streamlines data analysis by combining the powerful automatic lane defining and band sizing algorithms of the FMBIO with user-defined loci specific parameters. Instant compatibility with most genetics software (e.g. GENETIX, PROBMAX, Genpop and PHYLIP) eliminates errors encountered during manual reformatting. Quick-Check features save time by identifying sample sets not in Hardy-Weinberg equilibrium, when new alleles appear or when impossible genotypes are encountered in parentage studies.

Advantages

- Multi-color detection and a large scanning area make the FMBIO ideally suited for screening populations
- User-defined gel scoring template makes multiple gel scoring a snap
- Population analysis module offers a seamless transition into most population genetics software packages
- Perform high throughput electrophoresis with the JumboGel

FMBIO II Specifications

Laser:	Solid-state 532 nm YAG laser
Scan Area and Time:	20 cm x 43 cm dual color at standard resolution: 10 minutes
Detection Wavelengths:	Up to 4-color separation, selectable from 500 nm to 700 nm
Dynamic Range:	4 orders of magnitude
Compatible Dyes:	For a complete list please visit our Web site
Multiplex Dye Sets (filter):	<ul style="list-style-type: none">• 6-Fam (505 nm), Hex (585 nm) , Texas Red (650 nm)• 6-Fam (505 nm), Hex (560 nm), Ned (585 nm), Rox (605 nm)• Filters for novel dye sets are also available

www.mirai.bio.com

HITACHI Genetic Systems
By Hitachi Software Engineering

Hitachi Software Engineering Co., Ltd.

5-79 Onoe-Cho, Naka-ku
Yokohama 231-0015, Japan
Tel: 81-45-681-2111 · Fax: 81-45-681-4399

MiraiBio Inc.

1201 Harbor Bay Parkway, Suite 150
Alameda, CA 94502
Tel: 800-624-6176 · 510-337-2000 · Fax: 510-337-2099

Hitachi Software Engineering Europe S.A.

Parc de Limère-Z.I. d'Ardon-B.P. 629
45166 OLIVET Cedex-France
Tel: (+33) 238-69-86-90 · Fax: (+33) 238-69-86-99

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