

FMBIO® III/Plus Imager Application

ReliaGene Technologies' Y-Plex™ 6 Kit

These gel images, run on an FMBIO III Plus Imaging System, show the six Y-chromosomal genetic markers provided in ReliaGene Technologies' Y-Plex 6 Kit for human identification applications. The six different genetic markers or loci are DYS19, DYS385, DYS389II, DYS390, DYS391, and DYS393.

Validation samples and allelic ladder standards were prepared with 0.5 ul ROX standard, 1.5 ul Bromophenol Blue Loading Solution (Promega), and 1 ul amplified samples or allelic ladders. Solutions were then mixed and denatured at 95 °C for 2 minutes. Approximately 1.5 ul was loaded onto a 6% GenePAGE PLUS gel and run 1 hr and 50 min. on a SA47 Gel apparatus before scanning on the FMBIO III Plus Imaging System.

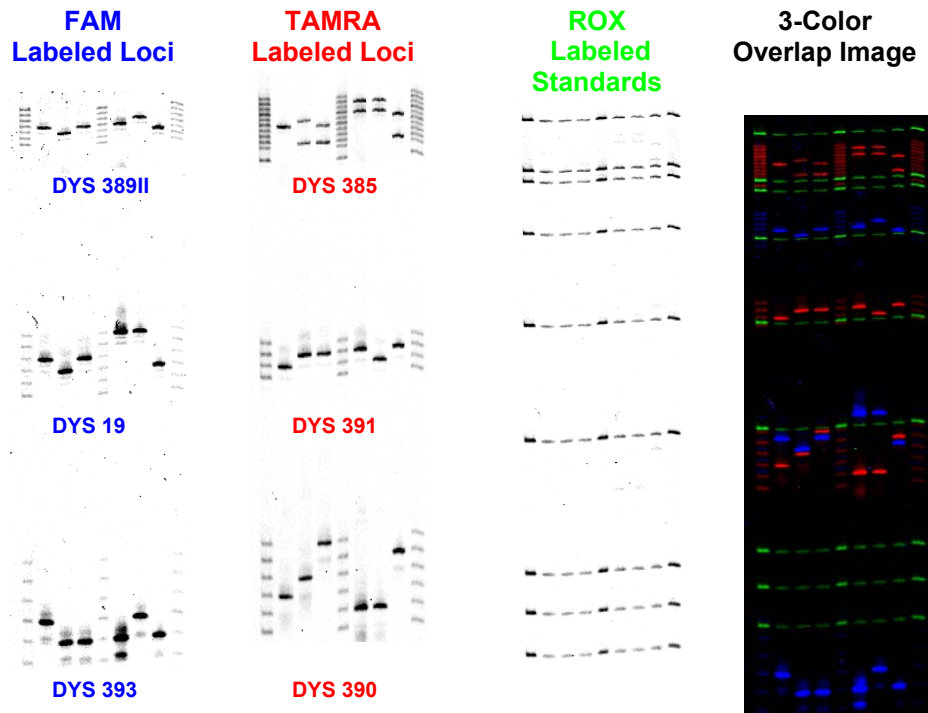


Table 1: FMBIO III Parameters

	Loci	Dye	Filter	Laser	PMT
Channel 1	DYS 385, DYS 391, DYS 390	TAMRA	580 nm	532 nm	90%
Channel 2	ROX 500	ROX	625 nm	532 nm	90%
Channel 3	DYS 389II, DYS 19, DYS 393	FAM	520 nm	488 nm	100%

When using the Y-Plex 6 Kit with the FMBIO III Plus Imaging system, Table 1 depicts the individual settings for each loci and dye combination used in the kits. Gels were also scanned in triplicate at a 100 um resolution to improve signal quality.

These images definitively show that ReliaGene Technologies' Y-Plex 6 Kit can be effectively used in combination with MiraiBio's FMBIO III Imaging systems. The 3-color overlap image allows for the convenient visualization of all three colors in a single image.

The allelic ladders (ROX 500) and Validation samples were kindly provided by ReliaGene.