

HTRF® Europium cryptate donor / Red acceptor readout Setup recommendations for Mithras² LB 943

The Mithras² LB943 reader must be equipped with the TR-FRET reading module which includes the necessary optical components for HTRF® readout. Two sequential readings at 620nm and 665nm emission wavelengths are performed. The ratio of the fluorescence intensities 665/620 (acceptor/donor) enables the calculation of Delta F (%) which represents the relative energy transfer rate for each sample.

The Mithras² LB943 operating software comes with pre-set ready-to-use parameter files for HTRF® measurements including the ratio calculation. The recommended settings are defined under the TR-Fluorescence protocol as described below:

Measurement 1

Excitation wavelength	D320 (40nm)
Emission wavelength	D620 (TRF)(10nm)
Lamp energy	100
Cycle time	2000 µs
Delay time	50 µs
Reading time	400 µs
Counting time	1s Optimal
Aperture	1
Operation mode	by plate

Measurement 2

Excitation wavelength	D320 (40)
Emission wavelength	D665 (TRF)(7.5nm)
Lamp energy	100
Cycle time	2000 µs
Delay time	50 µs
Reading time	400 µs
Counting time	1s Optimal
Aperture	1
Operation mode	by plate

- **This reader only allows high performance HTRF measurement when assays are run in WHITE plates.**



HTRF® Terbium cryptate donor / Green acceptor readout Setup recommendations for Mithras² LB 943

The Mithras² LB943 reader must be equipped with the TR-FRET reading module which includes the necessary optical components for HTRF® readout. Two sequential readings at 620nm and 520nm emission wavelengths are performed. The ratio of the fluorescence intensities 520/620 (acceptor/donor) enables the calculation of Delta F (%) which represents the relative energy transfer rate for each sample.

The Mithras² LB943 operating software comes with preset ready-to-use parameter files for HTRF® measurements including the ratio calculation. The recommended settings are defined under the TR-Fluorescence protocol as described below:

Measurement 1

Excitation wavelength	D340 (26nm)
Emission wavelength	D620 (TRF)(10nm)
Lamp energy	100
Cycle time	2000 µs
Delay time	50 µs
Reading time	400 µs
Counting time	1s Optimal
Aperture	1
Operation mode	by plate

Measurement 2

Excitation wavelength	D340 (26nm)
Emission wavelength	D520 (TRF)(10nm)
Lamp energy	100
Cycle time	2000 µs
Delay time	50 µs
Reading time	400 µs
Counting time	1s Optimal
Aperture	1
Operation mode	by plate

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HTRF[®] Terbium cryptate donor / Red acceptor readout Setup recommendations for Mithras² LB 943

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The Mithras² LB943 operating software comes with preset ready-to-use parameter files for HTRF[®] measurements including the ratio calculation. The recommended settings are defined under the TR-Fluorescence protocol as described below:

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Emission wavelength	D620 (TRF)(10nm)
Lamp energy	100
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Delay time	50 µs
Reading time	400 µs
Counting time	1s Optimal
Aperture	1
Operation mode	by plate

Measurement 2

Excitation wavelength	D340 (26nm)
Emission wavelength	D665 (TRF)(7.5nm)
Lamp energy	100
Cycle time	2000 µs
Delay time	50 µs
Reading time	400 µs
Counting time	1s Optimal
Aperture	1
Operation mode	by plate

This reader only allows high performance HTRF measurement when assays are run in WHITE plates

