

HTRF setup recommendations for Mithras² LB 943.



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 620 nm and 665 nm 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	Measurement 2
Excitation wavelength	D320 (40 nm)	D320 (40)
Emission wavelength	D620 (TRF) (10 nm)	D665 (TRF) (7.5 nm)
Lamp energy	100	100
Cycle time	2000 µs	2000 µs
Delay time	50 µs	50 µs
Reading time	400 µs	400 µs
Counting time	1s Optimal	1s Optimal
Aperture	1	1
Operation mode	by plate	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 620 nm and 520 nm 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	Measurement 1
Excitation wavelength	D340 (26 nm)	D340 (26 nm)
Emission wavelength	D620 (TRF) (10 nm)	D520 (TRF) (10 nm)
Lamp energy	100	100
Cycle time	2000 µs	2000 µs
Delay time	50 µs	50 µs
Reading time	400 µs	400 µs
Counting time	1s Optimal	1s Optimal
Aperture	1	1
Operation mode	by plate	by plate

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

HTRF Terbium 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 620 nm and 665 nm 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 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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Reading time	400 µs	400 µs
Counting time	1s Optimal	1s Optimal
Aperture	1	1
Operation mode	by plate	by plate

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

