

HTRF® Europium cryptate donor / Red acceptor readout Setup recommendations for Mithras LB 940

The Mithras LB940 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 Mithras LB940 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 filter	D320 (40)	Ref.:52733
Emission filter	D620 (TRF)(10)	Ref.:47731
Lamp energy	100	
Cycle time	2000 µs	
Delay time	50 µs	
Reading time	300 µs	
Counting time	1 s Optimal	
Operation mode	by plate	

Measurement 2

Excitation filter	D320 (40)	Ref.:52733
Emission filter	D665 (TRF)(7.5)	Ref.:52544
Lamp energy	100	
Cycle time	2000 µs	
Delay time	50 µs	
Reading time	300 µs	
Counting time	1 s Optimal	
Operation mode	by plate	



**The fluorescence ratio is a correction method developed by Cisbio Bioassays with an application limited to the use of HTRF® reagents and technology, and for which Cisbio Bioassays has granted a licence to Berthold technologies. The method is covered by the US patent 5,527,684 and its foreign equivalents.*