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HTRF® Terbium cryptate donor / Green acceptor readout
Setup recommendations for Synergy 2

Two sequential measurements should be carried out: at 620 nm for the cryptate emission, and at 520 nm for the specific signal emitted by the acceptor. 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 Synergy 2 must be equipped with a TRF module, i.e. SLFPTA, or SLFPTAD or custom equipped with a T module (TRF).
Synergy 2 readers must be appropriately configured for HTRF® readout by setting up the measurement conditions in the Gen5™ Reader Control and Data Analysis Software. In particular, these parameters should be entered as defined in the table below.
HTRF® assays must be read using the filter-based detection mode only. The monochromator mode is **not** HTRF® compatible.

Measurement 1

Excitation filter	340 (30) nm	Ref.: 7082230
Emission filter	620 (10) nm	Ref.: 7082265
Optics position	top 400	Ref.: 7138400
Number of flashes	10	
Lag time	100 µs	
Integration time	300 µs	
Sensitivity	Read the plate, select the well with the highest signal, and set its value at 50,000 counts	
Z	Select the default value given in the software	

Measurement 2

Excitation filter	340 (30) nm	Ref.: 7082230
Emission filter	520(10) nm	Ref.: 7092163
Optics position	top 400	Ref.: 7138400
Number of flashes	10	
Lag time	100 µs	
Integration time	300 µs	
Sensitivity	Read the plate, select the well with the highest signal, and set its value at 50,000 counts	
Z	Select the default value given in the software	

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

**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 BioTek. The method is covered by the US patent 5,527,684 and its foreign equivalents.*