

# HTRF setup recommendations for PHERAstar.



## HTRF Europium cryptate donor / red acceptor readout setup recommendations for PHERAstar

PHERAstar is equipped with a specific optical device, which enables the simultaneous measurement of both 620 nm cryptate and 665 nm acceptor emissions. The ratio\* of the two fluorescence intensities 665/620 (acceptor/donor) allows the calculation of Delta F (%) which represents the relative energy transfer rate for each sample.

HTRF™ readout can be achieved by PHERAstar after the installation of the HTRF dedicated optical block which includes the optimized excitation and emission filters, the dichroic mirror and the beam splitter. The measurement conditions should then be set up in the instrument software according to the following indications:

Setup	
Optic module	HTRF 337/620/665 Ref.: 906D1
Integration delay (lag time)	50 µs
Integration time	400 µs
Number of flashes	200
Optimal z-pos <sup>§</sup>	Volume and plate format dependent

<sup>§</sup>The focal height "z" is automatically calculated according to the plate format and the final working volume dispensed in the plate.

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

## HTRF Terbium cryptate donor / green acceptor readout setup recommendations for PHERAstar

PERAstar is equipped with a specific optical device, which enables the simultaneous measurement of both 620 nm cryptate and 520 nm acceptor emissions. The ratio\* of the fluorescence intensities 520/620 (acceptor/donor) allows the calculation of Delta F (%) which represents the relative energy transfer rate for each sample.

HTRF readout can be achieved by PHERAstar after the installation of two HTRF dedicated optical blocks which include the optimized excitation and emission filters, the dichroic mirror and the beam splitter. The measurement conditions should then be set up in the instrument software according to the following indications:

Setup	
Optic module first read	HTRF 337/620/665 Ref.: 906D1
Integration delay (lag time)	50 µs
Integration time	400 µs
Number of flashes	200
Optimal z-pos <sup>§</sup>	Volume and plate format dependent
Optic module second read	HTRF 337/520/490 Ref.: 910D1
Integration delay (lag time)	50 µs
Integration time	400 µs
Number of flashes	200
Optimal z-pos <sup>§</sup>	Volume and plate format dependent

<sup>§</sup>The focal height "z" is automatically calculated according to the plate format and the final working volume dispensed in the plate.

## HTRF Terbium cryptate donor / red acceptor readout setup recommendations for PHERAstar

PERAstar is equipped with a specific optical device, which enables the simultaneous measurement of both 620 nm cryptate and 665 nm acceptor emissions. The ratio\* of the fluorescence intensities 665/620 (acceptor/donor) allows the calculation of Delta F (%) which represents the relative energy transfer rate for each sample.

HTRF readout can be achieved by PHERAstar after the installation of the HTRF dedicated optical block which includes the optimized excitation and emission filters, the dichroic mirror and the beam splitter. The measurement conditions should then be set up in the instrument software according to the following indications:

Setup	
Optic module	HTRF 337/620/665 Ref.: 906D1
Integration delay (lag time)	50 $\mu$ s
Integration time	400 $\mu$ s
Number of flashes	200
Optimal z-pos <sup>§</sup>	Volume and plate format dependent

<sup>§</sup>The focal height "z" is automatically calculated according to the plate format and the final working volume dispensed in the plate.

