HTRF® Tb readout - Setup recommendations for PHERAstar

PHERAstar is equipped with a specific optical device, which enables the simultaneous measurement of both the 620 nm cryptate emission and the 665 nm acceptor emission. A ratio of the two fluorescence intensities* (acceptor/donor) then allows the calculation of Delta F (%), i.e. the relative energy transfer rate for each data point.

HTRF® Tb 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®
Integration delay (lag time)	50 µs
Integration time	400 µs
Number of flashes	200
Optimal z-pos §	Volume and plate format dependant

§ 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 CIS bio international, whose application is limited to the use of HTRF® reagents and technology, and for which CIS bio international has granted a licence to BMG Labtech. The method is covered by the US patent 5,527,684 and its foreign equivalents.*