

HTRF® Terbium cryptate donor / Red acceptor readout Setup recommendations for SpectraMax i3x®

To read HTRF®, the SpectraMax i3x® must be first equipped with the SpectraMax i3x® Cisbio HTRF® cartridge, which enables the simultaneous measurement of both 620nm donor and 665nm acceptor emissions. The ratio of the two fluorescence intensities 665/620 (acceptor/donor) enables the calculation of Delta F (%) which represents the relative energy transfer rate for each sample.

HTRF® readout can be achieved by SpectraMax i3x® readers after the installation of the HTRF® dedicated cartridge, which includes the optimized excitation and emission filters, the light source and the dichroic mirrors. The measurement conditions should then be set up in the SoftMax® Pro software according to the following indications:

Setup

Cartridge	HTRF® detection Cartridge #0200-7011POS
Number of flashes	30
Excitation time	0.05ms (fixed value)
Measurement delay)	0.03ms
Integration time	0.4ms
Read height	Volume and plate format dependant. Must be optimized before each new configured measurement using the labware optimization procedure of the software.

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

