

HTRF® Terbium cryptate donor / Red acceptor readout Setup recommendations for POLARstar OMEGA

POLARstar OMEGA is equipped with a specific optical device, which enables the measurement of both 620 nm cryptate and 665 nm 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.

POLARstar OMEGA readers must be appropriately configured for HTRF® readout by setting up the measurement conditions in the software according to the following indications:

Setup

Excitation filter	337 nm Ref.: 001-337TR (TR-Ex H)
Emission filters	620 (8.5) nm Ref.: 001-615TR 665 (10) nm Ref.: 001-665TR
Integration delay (lag time)	60 µs
Integration time	400 µs
Number of flashes	200
Optimal z-pos §	Volume and plate format dependent Adjustment to be done manually Select by default the following values: → 10.5 for 384 well low-volume plate → 8.0 for 96 well half-area plate
Gain	2300 for 665 and 620

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