



Lightning-Link® PE/Cy7 tandem Conjugate Data Sheet

Applicable to: 762-0005, 762-0010, 762-0015, 762-0030.

Release 2

19/04/2016

PE/Cy7 is a tandem label. In the Lightning Link PE/Cy7 tandem when the PE is excited it functions as a donor and the energy that would be released as PE fluorescence is transferred via FRET (Förster Resonance Energy Transfer) to the acceptor Cy7. Cy7 then emits the energy as far red fluorescence. The FRET is not always 100 %, so some fluorescence from the PE can be seen, and Cy7 will still absorb light from other sources as well as from the PE, which causes the extra peaks in the spectra.

Details of the fluorescence

Maximum Absorbance	Maximum Fluorescence Emission	Suggested Excitation Laser Lines	Fluorescence Color	Stokes Shifts
498, 544, 566 nm*	782 nm	488, 532, 561 nm	Far red	284, 238, 216 nm

* R-PE has three maxima, and all can be used. The optimal one will depend on the application.

Scans of the Absorbance and Fluorescence Emission of a Lightning-Link® PE/Cy7 Conjugate

