

RadiantDOTS™ - Enhanced TRF Nanocolloids

Time resolved fluorescent (TRF) technology is emerging as an important tool in drug discovery and diagnostics. Based on our novel chelation and nanocolloid technologies, BioPAL has developed a line of TRF reagents for research applications.

RadiantDOTS are nanosized colloids consisting of a lanthanide crystal wrapped within a polystyrene coating that can be modified for specific applications, such as labeling with ligands and macromolecules. As their name suggests, **RadiantDOTS** are intrinsically fluorescent.

RadiantDOTS and **RadiantDOTS Amino** are available having a diameter of 35 nm and 140 nm, respectively. Other sizes are under development. BioPAL currently offers europium-labeled **RadiantDOTS**, which have a long-wavelength emission (~615 nm) that is well separated from the excitation peak (~340 nm). Other lanthanide labels, such as terbium, are under development.

Catalog Number

RD-01K35	RadiantDOTS Europium - CML.....\$ 170.00 BioPAL offers carboxylate-modified latex (CML) colloids that have carboxyl groups at the surface. 35 nm ($0.035 \pm 0.001 \mu\text{m}$) in diameter nanocolloids, 2 ml packaged in a sealed serum bottle (0.5% solids).
RD-03K35	RadiantDOTS Europium - Amino\$ 170.00 BioPAL offers amine-modified latex colloids that have amino groups at the surface. 140 nm ($0.14 \pm 0.01 \mu\text{m}$) in diameter, amino coated nanocolloids, 0.5 ml packaged in a sealed serum bottle (0.5% solids).

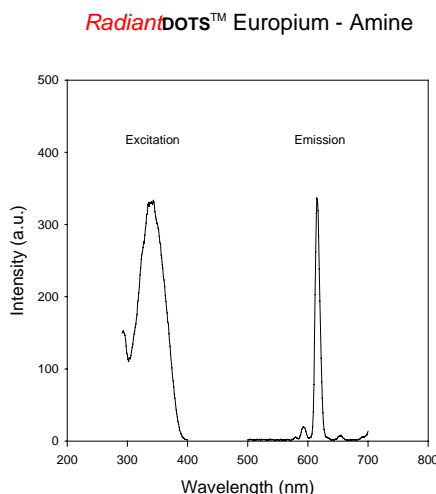


Figure: Excitation and emission profile of europium. The plot depicts the excitation and emission spectrums from **RadiantDOTS** Europium - Amine(Eu). Note the very narrow emission peak, as well as the large Stokes shift of the fluorophor.

