

SDIP/Europium for Membrane Fusion Assay



Product attributes

Probe cellular localization	Fluid phase tracer
Cell permeability	Membrane impermeant
Colors	Far-red
Excitation/Emission	250 -320/610 nm

Biotium developed SDIP/Eu³ as an alternative to DPA/Tb³ ([80104](#)), which is used for vesicle fusion assays.

Product Description

Biotium developed SDIP/Eu³ as an alternative to DPA/Tb³ ([80104](#)), which is used for vesicle fusion assays. Similar to DPA/Tb³ assay, one population of vesicles can be loaded with the chelator SDIP while another population of vesicles can be loaded with EuCl₃. Intense red fluorescence is produced when the two types of vesicles fuse as a result of formation of the SDIP/Eu³ complex. The main advantage of SDIP/Eu³ over DPA/Tb³ is that the SDIP/Eu³ generates fluorescent emission with brighter intensity and much longer wavelength. Each set of products contain 50 mg SDIP and 25 mg EuCl₃ in two separate vials.

- $\lambda_{Abs}/\lambda_{Em}$ (for complex) = 250 ~320/~610 nm
- SDIP is a light yellow solid
- EuCl₃ is in a colorless crystal
- Both are readily soluble in water
- Both components are stable at room temperature or 4 °C
- Aqueous solutions of SDIP should be protected from light
- MW of SDIP: 449
- MW of EuCl₃: ~258

