SDIP/Europium for Membrane Fusion Assay

Biotium developed SDIP/Eu^3 as an alternative to DPA/Tb^3 (80104), which is used for vesicle fusion assays.

Product attributes

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

Product Description

Biotium developed SDIP/Eu^3 as an alternative to DPA/Tb^3 (80104), which is used for vesicle fusion assays. Similar to DPA/TB^3 assay, one population of vesicles can be loaded with the chelator SDIP while another population of vesicles can be loaded with $EuCl_3$. Intense red fluorescence is produced when the two types of vesicles fuse as a result of formation of the SDIP/Eu^3 complex. The main advantage of SDIP/Eu^3 over DPA/TB^3 is that the SDIP/Eu^3 generates fluorescent emission with brighter intensity and much longer wavelength. Each set of products contain 50 mg SDIP and 25 mg $EuCl_3$ in two separate vials.

- λAbs/λEm(for complex) = 250 ~320/~610 nm
- SDIP is a light yellow solid
- $EuCl^3$ 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 $EuCl^3$: ~258