# 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