

DPA/Terbium for Membrane Fusion Assay



Product attributes

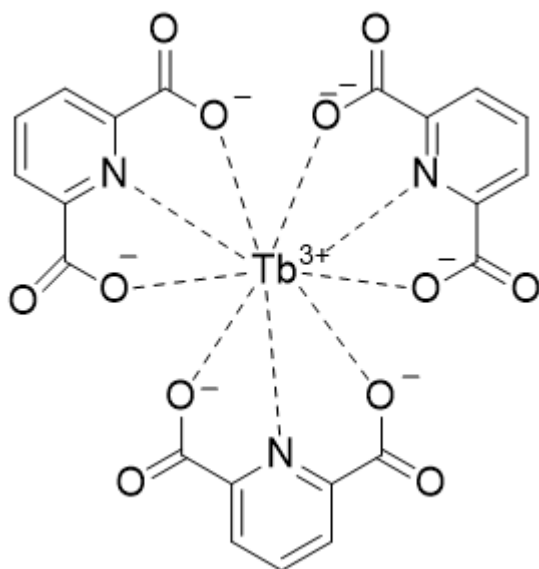
Probe cellular localization	Fluid phase tracer
Cell permeability	Membrane impermeant
Colors	Orange
Excitation/Emission	276/490, 545 nm

The principle of DPA/Tb³⁺ for vesicle fusion assay is based on the fact that contact of the chelator dipicolinic acid (DPA) with terbium (III) forms an instant Tb³⁺-DPA complex that is ~10,000 times more fluorescent than free Tb³⁺. In the assay, separate vesicle populations are loaded with 2.5 mM TbCl₃ in 50 mM sodium citrate, or 50 mM DPA in 20 mM NaCl.

Product Description

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- λEx/λEm (DPA/Tb³⁺ complex) = 276/490 and 545 nm
- DPA and Terbium are white solids and readily soluble in water
- Store both reagents at room temperature
- MW of DPA: 167.12
- CAS#: 499-83-2
- MW of Terbium: 265.3
- CAS#: 13798-24-8



References

1. Biochemistry 19, 6011 (1980).
2. Nature 281, 690 (1979).
3. Biochemistry 33, 5805 (1994).
4. J Biol Chem 269, 14473 (1994).