**Sphingosine 1-phosphate fluorescein (S1P-Fluorescein)**

**Catalog number:** S-200F

**Molecular Formula:** \( C_{37}H_{52}N_3O_{11}P \)

**MW:** 769.8

**CAS:** n/a

**Excitation/Emission:** 494/521 nm

**Solubility:** MeOH or DMSO, >1 mg/ml. Stock solutions can be further diluted into aqueous buffer.

**Storage and Handling:** Sphingosine 1-phosphate fluorescein is relatively stable at room temperature as a solid. It is best stored as a dried solid at -20°C. Solutions/emulsions of sphingosines should be kept at -20°C. Storage in basic buffers (pH > 9.0) or acidic buffers (pH < 4.0) may cause decomposition. Protect from light.

**Background:** Sphingosine 1-phosphate (S1P) is a bioactive lysophospholipid formed by phosphorylation of sphingosine by sphingosine kinases. S1P binds to five G-protein coupled receptors designated S1P<sub>1</sub>-S1P<sub>5</sub> leading to cell proliferation, motility, and has a role in regulation cell shape. In addition, S1P acts as an intracellular mediator in a receptor-independent manner regulating cell survival and Ca<sup>2+</sup> homeostasis.

**References:**