# MM 1-43 [N-(3-Triethylammoniumpropyl)-4 <br> -(4-(dibutylamino)styryl)pyridinium <br> dibromide] *CAS\#: 149838-22-2* 

## Product Details

| Storage Conditions | Freeze $\left(<-15^{\circ} \mathrm{C}\right)$, Minimize light exposure |
| :--- | :--- |
| Expiration Date | 12 months upon receiving |

## Chemical Properties

| Appearance | Red solid |
| :--- | :--- |
| Molecular Weight | 611.54 |

Soluble In Water

Chemical Structure


## Spectral Properties

| Excitation Wavelength | 473 nm |
| :--- | ---: |
| Emission Wavelength | 579 nm |

## Applications

MM 1-43 is the abbreviation of our Membrane Marker 1-43, chemically called
N -(3-triethylammoniumpropyl)-4-(4-(dibutylamino)styryl)pyridinium dibromide. MM 1-43 is chemically the same molecule of FM 1-43. In literature this membrane marker is also called "FM 1-43" (FM ${ }^{\circledR}$ is the trademark of Molecular Probes). It is a water-soluble membrane probe that belongs to the styryl dye family. It is widely used in cell biology and neurobiology since it has minimal toxicity to cells. MM 1-43 is virtually non-fluorescent in aqueous medium and strongly fluorescent upon binding to membrane. It is efficiently excited with standard fluorescein optical filters, and exhibits an intense fluorescent signal when associated with the plasma membrane. MM 1-43 has frequently been used to quantify exocytosis in neurons. Fluorescence imaging using MM 1-43 and related styryl dyes has provided invaluable insights into presynaptic function of synapses in culture preparations.

