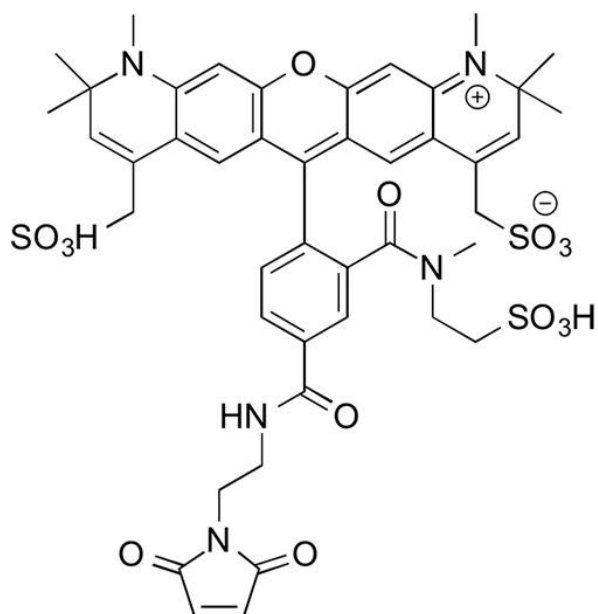


MB 594 MALEIMIDE

SKU: FP-1648



Description



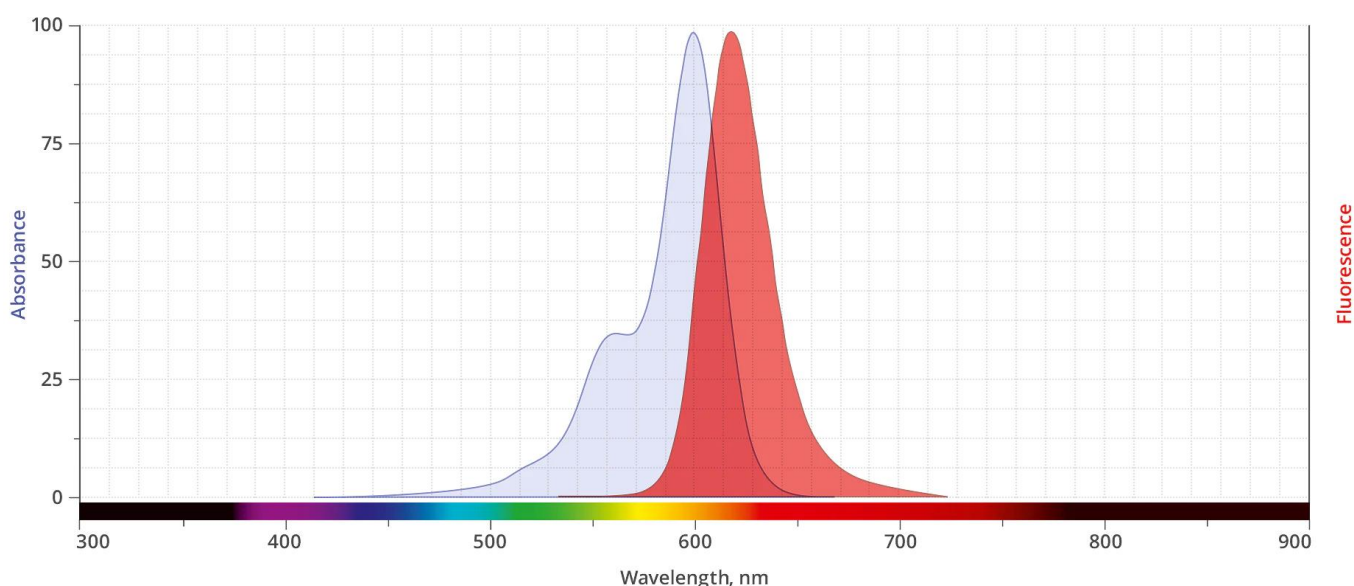
MB™ 594 is a very hydrophilic, water-soluble red fluorescent dye. Structurally related to Alexa Fluor® 594 dye, MB™ 594 dye contains an additional, negatively charged sulfo group (SO₃H) to improve water solubility and minimize self-quenching. Characteristic features of MB™ 594 are strong absorption, high fluorescence quantum yield, high photostability, and pH insensitivity.

For research use only. Not intended for animal or human therapeutic or diagnostic use.

from pH 3 to pH 10. MB™ 594 is a highly suitable dye for single-molecule detection applications and high-resolution microscopy such as PALM, dSTORM, STED etc.

[Maleimide](#) is the most popular sulfhydryl-reactive reactive group for conjugating the dye to a thiol group on a protein, oligonucleotide thiophosphate, or low molecular weight ligand. The maleimide group specifically and efficiently reacts with reduced thiols (sulfhydryl groups, -SH) at pH 6.5 to 7.5 to form stable thioether bond. The resulting conjugates exhibit brighter fluorescence and greater photostability than the conjugates of many other spectrally similar fluorophores.

Abs/Em Spectra



Specifications

Unit Size	1 mg, 5 mg, 25 mg, 100 mg
Reactivity	Thiol (Cys)
Abs/Em Maxima	601/623 nm
Extinction coefficient	110,000 cm ⁻¹ M ⁻¹
Solubility	Water, DMSO, DMF
Spectrally similar dyes	Alexa Fluor® 594, CF® 594, Texas Red
Molecular weight	996.06
Storage Conditions	-20°C.

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Shipping Conditions

Ambient temperature

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