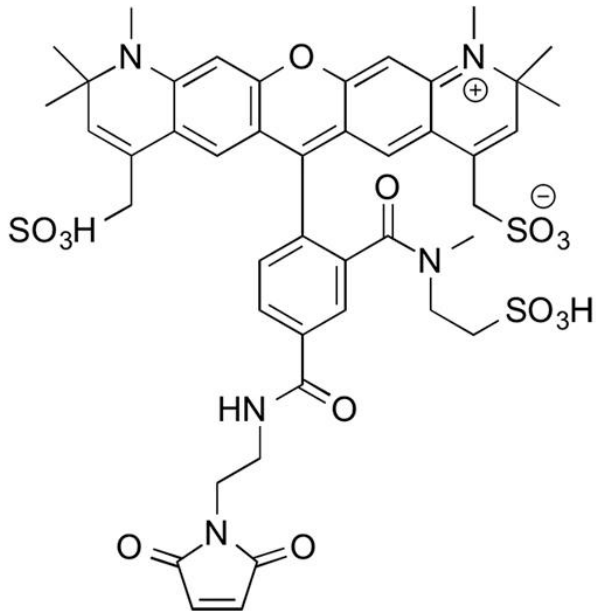




MB 594 MALEIMIDE

SKU: FP-1648



DESCRIPTION

594



Laser
line

Texas Red



Common
filter set

601



Excitation
max

623



Emission
max

For research use only. Not intended for therapeutic or diagnostic use in animals or humans.



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 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.

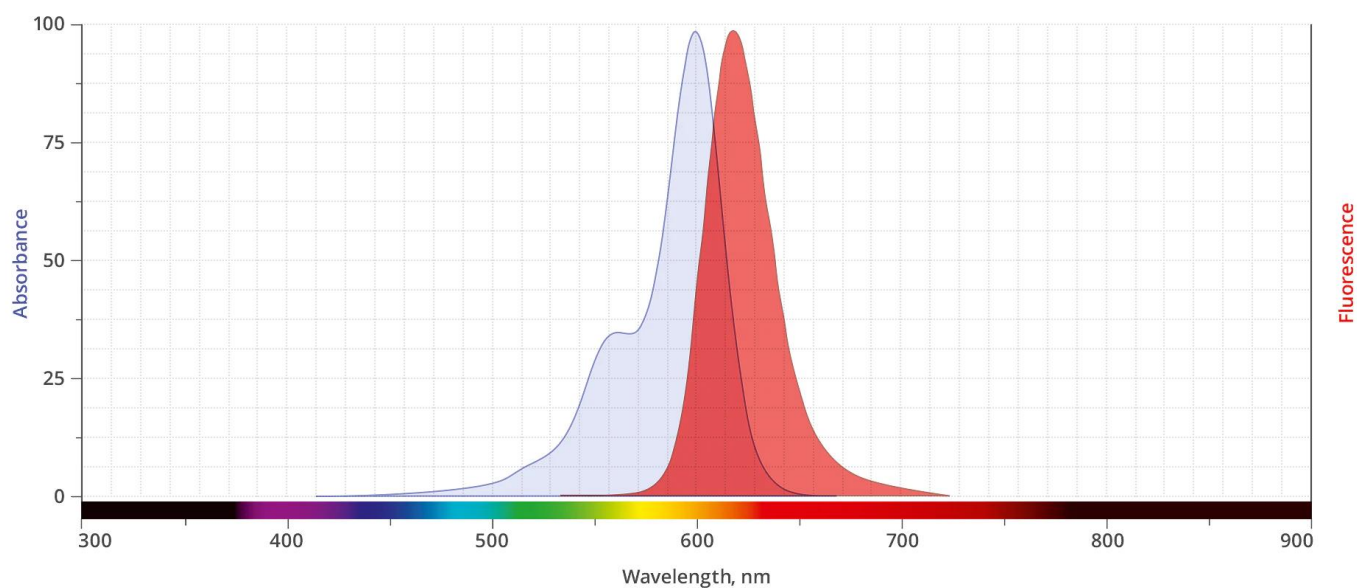
Maleimide is the most popular sulfhydryl-reactive reactive group for conjugating the dye to a thiol group on a protein, oligonucleotide thiophosphate, or low molecular weight ligand. The maleimide group specifically and efficiently reacts with reduced thiols (sulfhydryl groups, -SH) at pH 6.5 to 7.5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

SPECIFICATIONS

Molecular Weight	996.06
Extinction Coefficient	110,000 cm ⁻¹ M ⁻¹
Reactivity	Thiol (Cys)
Unit Size	1 mg, 5 mg, 25 mg, 100 mg
Solubility	Water, DMSO, DMF
Storage Instructions	-20°C.
Spectrally Similar Dyes	Alexa Fluor® 594, CF® 594, Texas Red
Excitation/Emission Maximum	601/623 nm
Shipping Conditions	Ambient temperature
Shipping Instructions	Ambient temperature

ABS/EM SPECTRA

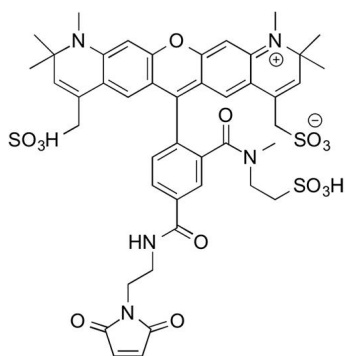
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DOCUMENTS

- [Safety Data Sheet](#)
- [Datasheet](#)

GALLERY IMAGES



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