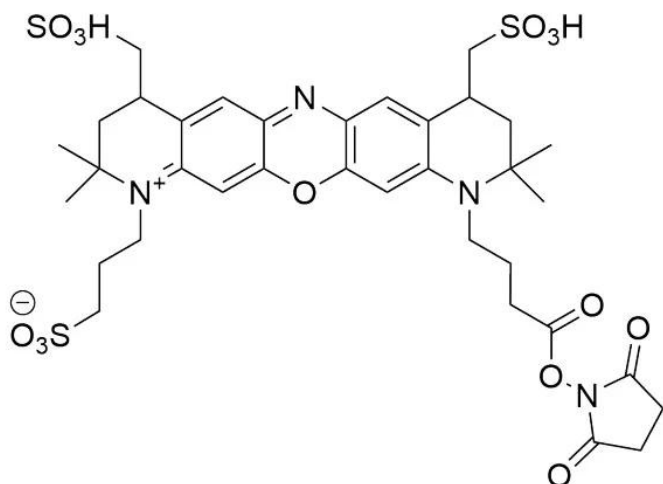




## **MB 660R NHS ESTER**

**SKU:** FP-1661



## **DESCRIPTION**

**633/647**



Laser  
line

**Cy5**



Common  
filter set

**650**



Excitation  
max

**665**



Emission  
max

MB™ 660R is a bright and photostable far-red dye that emits fluorescence at about 685 nm in the borderline spectral region between far-red and near-IR. Although the absorption maximum is at around 665 nm, this dye can be sufficiently excited by the 633 or 635 nm laser. MB™ 660R dye is water soluble and pH-insensitive from pH 4 to pH 10. MB 660R is a rhodamine-based dye, and like rhodamine dyes in general, it is exceptionally photostable (Figure 1, description tab).

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



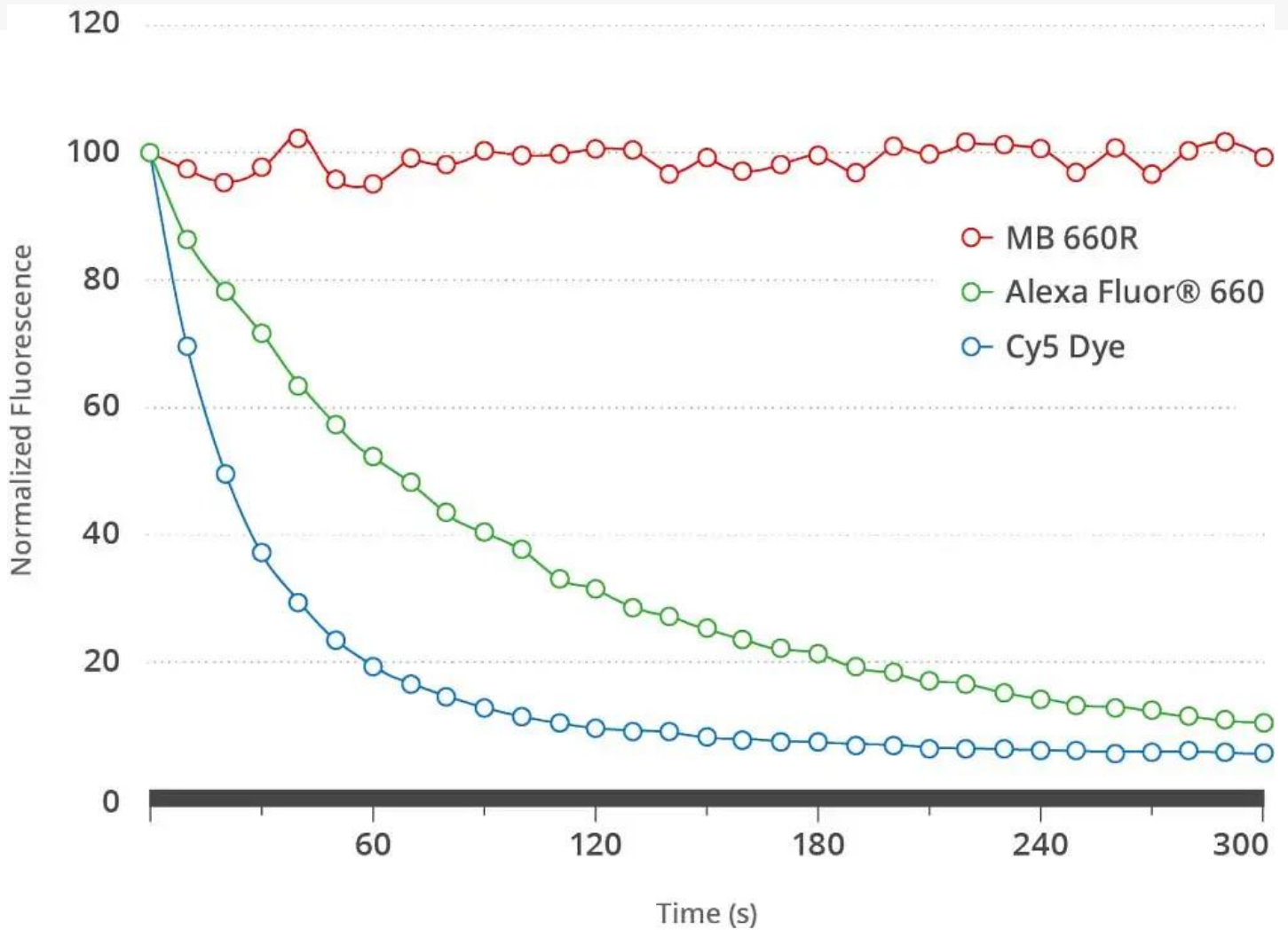
The superior photostability and excellent brightness of MB 660R make the dye an ideal choice for confocal microscopy and other demanding applications.

The NHS Ester reacts specifically and efficiently with a primary amine (e.g., side chain of lysine residues or aminosilane-coated surfaces) at pH 7-9 to form a stable, covalent amide bond. The NHS ester (or succinimidyl ester) is the most popular tool for conjugating dyes to the primary amines of protein or antibody (Lys), amine-modified oligonucleotides, and other amine-containing molecules.

MB™ 660R NHS Ester is an amine reactive, far-red emitting dye routinely used to label proteins or antibodies through the primary amines (Lys), amine-modified oligonucleotides, and other amine-containing biomolecules. The labeling occurs most efficiently at pH 7-9 and forms a stable, covalent amide bond.

MB™ 660R is a bright and photostable far-red dye that emits fluorescence at about 685 nm in the borderline spectral region between far-red and near-IR. Although the absorption maximum is at around 665 nm, this dye can be sufficiently excited by the 633 or 635 nm laser. MB™ 660R dye is water soluble and pH-insensitive from pH 4 to pH 10. MB 660R is a rhodamine-based dye, and like rhodamine dyes in general, it is exceptionally photostable (Figure 1). The superior photostability and excellent brightness of MB 660R make the dye an ideal choice for confocal microscopy and other demanding applications.

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



MB 660R dye spectrally is almost identical to Alexa Fluor® 660 and CF® 660R Dye and can be used as a less expensive alternative to these dyes.

Alexa Fluor® is a registered trademark of Thermo Fisher Scientific. CF® Dye is a registered trademark of Biotium.

## SPECIFICATIONS

<b>Molecular Weight</b>	840.90 (protonated)
<b>Extinction Coefficient</b>	92,000 cm <sup>-1</sup> M <sup>-1</sup>
<b>Reactivity</b>	Primary amine
<b>Unit Size</b>	1 mg, 5 mg, 25 mg, 100 mg

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



**Solubility**

Water, DMSO, DMF

**Storage Instructions**

-20°C.

**Spectrally Similar Dyes**

Alexa Fluor® 660, CF® 680R

**Excitation/Emission Maximum**

665/690 nm

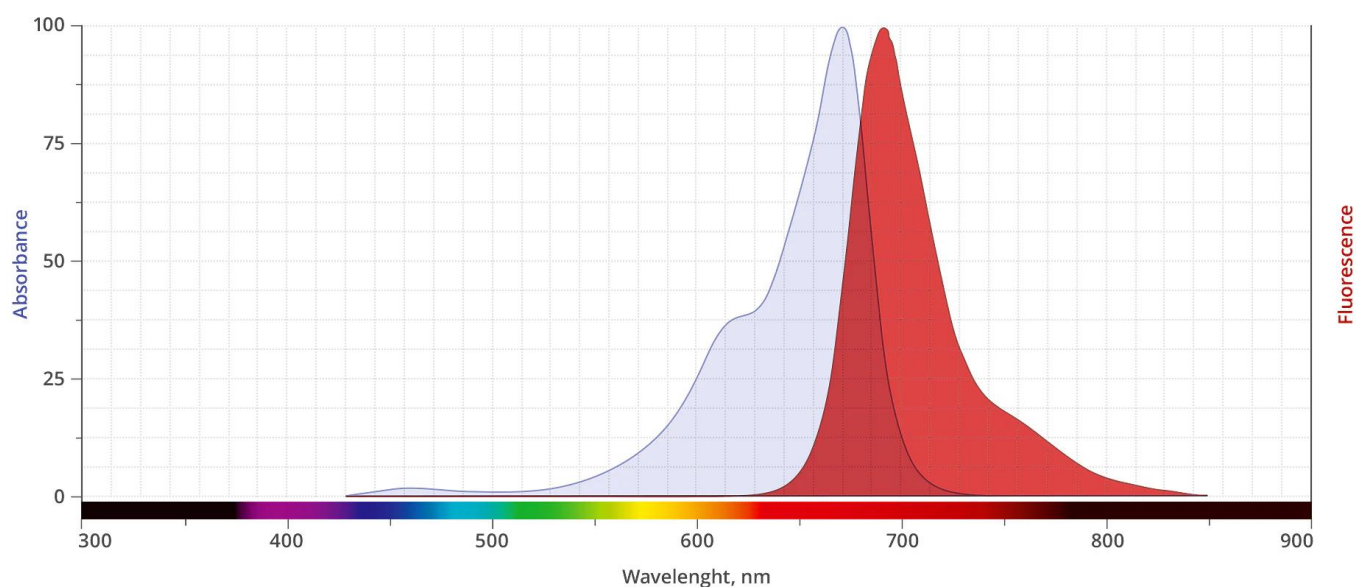
**Shipping Conditions**

Ambient temperature

**Shipping Instructions**

Ambient temperature

## ABS/EM SPECTRA



## DOCUMENTS

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

## GALLERY IMAGES

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

