

**XFD488 NHS Ester-UltraPure Grade \*XFD488  
Same Structure to Alexa Fluor™ 488\***Catalog number: 1810, 71901  
Unit size: 1 mg, 5 mg**Product Details**

---

Storage Conditions	Freeze (<-15 °C), Minimize light exposure
Expiration Date	12 months upon receiving

**Chemical Properties**

---

Appearance	Red solid
Molecular Weight	643.40
Soluble In	DMSO

**Spectral Properties**

---

Excitation Wavelength	499 nm
Emission Wavelength	520 nm

**Applications**

---

XFD488 is manufactured by AAT Bioquest, and it has the same chemical structure of Alexa Fluor® 488 (Alexa Fluor® is the trademark of ThermoFisher). XFD488 NHS Ester (Succinimidyl Ester) has the same molecule as Alexa Fluor® 488 NHS Ester (#A20000 and A20100 from ThermoFisher). It is a bright green-fluorescent dye optimal for use with the 488 nm Argon laser. XFD488 dye is water soluble and pH-insensitive from pH 4 to pH 10. XFD488 NHS ester (or succinimidyl ester) is the most convenient amine-reactive form for conjugating this dye to a protein or antibody. Although the Alexa Fluor® 488 NHS Ester is one of the most common green fluorescent labeling dyes, its purity has been quite challenging. ThermoFisher provides it with purity of ~50-60% while a few other vendors offer it at even lower purities. Among all the impurities, we noted that the Bis-NHS ester of XFD488 is quite detrimental since it could give a non-fluorescent product. This high purity XFD488 NHS ester is free of the detrimental XFD488 Bis-NHS ester impurity with the minimal purity of >75%.