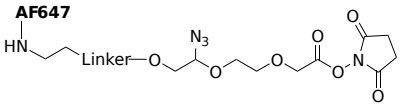
ReadiCleave™ XFD647 AML-NHS ester

Catalog Number: 7012
Unit Size: 1 mg

Product Details

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

Chemical Properties

Appearance	Solid blue
Molecular Weight	1609.00
Soluble In	DMSO
Chemical Structure	

Spectral Properties

Excitation Wavelength	650 nm
Emission Wavelength	671 nm

Applications

Fluorescence-based methods have many advantages for biological detection in terms of sensitivity and convenience. Many biological molecules can be readily labeled with a fluorescent tag for fluorescence imaging and flow cytometry analysis. However, most of the existing fluorescent tags are used to permanently label biological targets from which the added fluorescent tags cannot be cleaved for further downstream analysis, such as mass spectral analysis. AAT Bioquest's ReadiCleave™ linkers enable fluorescent tags to be conjugated to a biological target from which the added fluorescent tag can be removed when needed. This ReadiCleave™ AML XFD647 contains an azidomethyl linker that can be cleaved with TCEP to remove the Alexa Fluor® 647 fluorophore from the conjugated molecule. The cleavage can be carried out by adding 10 mM TCEP solution (pH 7.5) and incubating at 65 °C for 1-5 min. XFD647 is the same fluorophore as Alexa Fluor® 647 (Alexa Fluor® is the trademark of ThermoFisher). Alexa Fluor® 647 is a popular fluorescent dye used in fluorescence microscopy and flow cytometry. It is known for its high fluorescence intensity, which makes it a valuable tool for detecting and imaging specific targets in biological samples. Alexa Fluor 647 has an excitation wavelength around 650 nanometers and an emission wavelength around 668 nanometers. This far-red to near-infrared emission range is advantageous because it reduces background fluorescence and autofluorescence from biological samples.