

## XFD635 azide

Catalog Number: 70084

Unit Size: 1 mg

### Product Details

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

### Chemical Properties

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|                  |       |
|------------------|-------|
| Appearance       | Solid |
| Molecular Weight | N/A   |
| Soluble In       | DMSO  |

### Spectral Properties

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|                       |        |
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| Excitation Wavelength | 633 nm |
| Emission Wavelength   | 647 nm |

### Applications

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XFD635, manufactured by AAT Bioquest, is a bright far red-fluorescent dye structurally similar to Alexa Fluor™ 635 (Thermo Fisher). It is characterized by its intense brightness, high fluorescence quantum yield and photostability. The dye demonstrates excellent solubility in aqueous solutions and retains pH-independent fluorescence over a broad range (pH 4–11), ensuring consistent performance across diverse experimental conditions. Optimally excited by the 633 nm emission line of He-Ne lasers or the 635 nm diode laser, XFD635 is particularly well-suited for flow cytometry. Its robust and uniform labeling properties yield high signal intensity and reproducibility, making it an ideal choice for advanced fluorescence imaging, flow cytometry, and various fluorescence-based analytical techniques.

The azide derivative of XFD635 is widely used for labeling terminal alkynes on peptides, antibodies, and other biomolecules via click chemistry. It participates in copper-catalyzed azide-alkyne cycloaddition (CuAAC) with alkyne-containing molecules and strain-promoted alkyne-azide cycloaddition (SPAAC) with DBCO- or BCN-containing molecules.