

## Wheat Germ Agglutinin, XFD647 Labeled \*XFD647 Same Structure to Alexa Fluor® 647\*

Catalog Number: 25512

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	Water

### Spectral Properties

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Excitation Wavelength	604 nm
Emission Wavelength	671 nm

### Applications

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XFD647, manufactured by AAT Bioquest, has an identical chemical structure to Alexa Fluor® 647, a trademark of ThermoFisher. Wheat germ agglutinin (WGA) is a well-researched lectin known for its valuable biological applications. Due to its ability to bind to glycoconjugates, WGA derivatives and conjugates are widely used to label yeast bud scars, fibrotic scar tissue, and the cell membrane of gram bacteria and mammalian cells. WGA specifically targets sequences of  $\beta$ -1,4-GlcNAc-linked residues known as chitodextrins. Each monomer possesses two identical, non-interacting binding sites that complement 3 or 4  $\beta$ -1,4-GlcNAc units. Among the tested monosaccharides, only GlcNAc exhibits binding to WGA, while ManNAc does not bind, and GalNAc demonstrates weak binding. XFD647 WGA conjugate, like its counterpart Alexa Fluor® 647 WGA conjugate, emits a bright red fluorescence and is useful in a variety of applications, including immunofluorescence (IF), immunohistochemistry (IHC), and flow cytometry (FC).