

Wheat Germ Agglutinin, XFD647 Labeled

Catalog Number: 25512

Unit Size: 1 mg

Product Details

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

Units	25512 (1 mg)
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Reconstitution Volume	0.5 mL ddH ₂ O
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Chemical Properties

Appearance	Solid blue
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Molecular Weight	N/A
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Soluble In	Water
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Spectral Properties

Excitation Wavelength	650 nm
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Emission Wavelength	671 nm
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Applications

XFD647, manufactured by AAT Bioquest, has a similar chemical structure to Alexa Fluor® 647, a trademark of Thermo Fisher. 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 β -1,4-GlcNAc-linked residues known as chitodextrins. Each monomer possesses two identical, non-interacting binding sites that complement 3 or 4 β -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).