Wheat Germ Agglutinin, XFD488 Labeled

Catalog Number: 25500
Unit Size: 1 mg

Product Details

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

Unit Details

Units	25500 (1 mg)
Reconstitution Volume	0.5 mL ddH2O

Chemical Properties

Appearance	Solid orange
Molecular Weight	N/A
Soluble In	Water

Spectral Properties

Excitation Wavelength	499 nm
Emission Wavelength	520 nm

Applications

XFD488 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 488 (Alexa Fluor® is the trademark of Thermo Fisher). Wheat germ agglutinin (WGA) is a lectin that binds to N-acetyl-D-glucosamine and sialic acid. It is of the most studied and useful lectins for its biological applications. Since WGA binds to glycoconjugates its derivatives and conjugates are widely used to label cell membranes and fibrotic scar tissue for fluorescence imaging and analysis. The carbohydrate-binding specificity of WGA is directed against sequences of β-1,4-GlcNAc-linked residues, the chitodextrins. Each monomer contains two identical, non-interacting binding sites, which are complementary to 3 or 4 β-1,4-GlcNAc units. Of the monosaccharides examined, only GlcNAc binds to WGA. ManNAc does not bind, and GalNAc binds only weakly. XFD488 conjugate of WGA is equivalent to the Alexa Fluor® 488 conjugate of WGA. It exhibits bright, green fluorescence. XFD488 WGA conjugate binds to sialic acid and N-acetylglucosaminyl residues.