Concanavalin A, XFD488 Labeled

Catalog Number: 25570
Unit Size: 1 mg

Product Details

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

Unit Details

Units	25570 (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). Concanavalin A (ConA) is a lectin that binds specifically to certain structures found in various sugars, glycoproteins and glycolipids. ConA is widely used in biology and biochemistry to characterize glycoproteins and other sugar-containing entities on the surface of various cells. It is also used to purify glycosylated macromolecules in lectin affinity chromatography, as well as to study immune regulation by various immune cells. ConA binds specifically α-D-mannosyl and α-D-glucosyl residues (two hexoses differing only in the alcohol on carbon 2) in terminal position of ramified structures from B-Glycans. It has 4 binding sites, corresponding to the 4 subunits. Concanavalin A (Con A) is one of the most widely used lectins in cell biology. XFD488-labeled Concanavalin A (equivalent to Alexa Fluor® 488 conjugate of Con A, Alexa Fluor® is the trademark of Thermo Fisher) exhibits the bright, green fluorescence (Ex/Em maxima ~495/519 nm). XFD488 labeled Con A selectively binds to a-mannopyranosyl and a-glucopyranosyl residues.