

## iFluor® 750-Concanavalin A Conjugate

Catalog Number: 25598

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 | 757 nm |
| Emission Wavelength   | 779 nm |

### Applications

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iFluor 750-labeled Concanavalin A selectively binds to  $\alpha$ -mannopyranosyl and  $\alpha$ -glucopyranosyl residues and exhibit the NIR fluorescence. Concanavalin A (ConA) is a lectin, a type of protein that specifically binds to carbohydrates, found in the seeds of the Jack bean plant (*Canavalia ensiformis*). ConA is widely used as a tool for studying carbohydrate-binding proteins, cell surface glycans, and cellular processes involving glycoproteins and glycolipids. ConA binds specifically to the sugar molecule mannose and glucose, which are commonly found in the carbohydrates of glycoproteins and glycolipids. When added to a biological sample, ConA can be used to selectively isolate and purify glycoproteins or to detect the presence of glycoproteins and glycans in cells and tissues. Additionally, ConA can activate T cells and stimulate cell proliferation and differentiation. ConA has been used in a variety of applications, including cell sorting, immunoassays, and studies of cellular signaling pathways. It has also been investigated as a potential therapeutic agent for the treatment of autoimmune diseases and cancer.