



Product Information

NIR-II agent, Xylan-PEG-near-infrared (nir-ii) dye, Purity $\geq 95\%$

Cat. No.: X25-05-YM1041

Size: 100 mg; 250 mg; 500 mg; 1 g; 5 g

Synonym: Xylan-PEG-near-infrared (nir-ii) dye; NIR-II-PEG-xylan

This product is for research use only and is not intended for diagnostic use.

Product Information

Description	Xylan-PEG-near-infrared (nir-ii) dye represents a tripartite assembly engineered to amalgamate the sustainable polymeric framework of xylan—a plant-derived polysaccharide consisting of β -1,4-xylose units—with NIR-II dye's molecular properties via PEG spacer conjugation. The hydrophilic carbohydrate backbone provides aqueous medium affinity and tissue adhesion performance that enhance biological interface compatibility.
Molecular Formula	0
Glycan Structure	Its glycan structure is a linear backbone of β -1,4-linked D-xylose residues with side-chain substitutions including α -linked arabinofuranose, glucuronic acid/4-O-methyl-glucuronic acid, and acetyl groups at O-2 or O-3 positions.
Source	Chemical synthesis
Form	Solid or powder
Purity	$\geq 95\%$
Impurities	No visible impurities to the naked eye.
Solubility	This product is soluble in most organic solvents, such as DCM, DMF, DMSO, and THF, and exhibits excellent solubility in water.
Identity	Confirmed by NMR.
Stability	It is stable under its storage temperature.
Quality Level	Research grade
Applications	Xylan-PEG-near-infrared (nir-ii) dye can be used for its potential to enable deep-tissue imaging through second near-infrared window fluorophore conjugation.
Storage	Store at -20°C , protect from light and moisture.