

Product Information

Silane agent, Xylan-PEG-silane, Purity $\geq 95\%$

Cat. No.: X25-05-YM1039

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

Synonym: Xylan-PEG-silane; Silane-PEG-xylan

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

Product Information

Description	Xylan-PEG-silane creates a tripartite conjugate system formulated to integrate the ecologically favorable structural elements of xylan—a β -1,4-xylose-based biopolymer derived from plant hemicellulose sources—with silane's functional characteristics <i>via</i> PEG-mediated bridging. The polysaccharide framework ensures water compatibility and surface adhesion performance that improve biocompatibility parameters.
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-silane can be used for its potential to enhance silica nanoparticle functionalization through silane coupling agent studies.
Storage	Store at -20°C , protect from light and moisture.