

Product Information

PEI agent, Xylan-PEG-polyethyleneimine, Purity $\geq 95\%$

Cat. No.: X25-05-YM1028

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

Synonym: Xylan-PEG-polyethyleneimine; PEI-PEG-xylan

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

Product Information

Description	Xylan-PEG-polyethyleneimine constitutes a tripartite molecular system developed to synergize xylan's renewable structural framework—composed of β -1,4-linked xylose residues obtained from vegetative hemicellulose materials—with PEI's biochemical attributes through polyethylene glycol intermediation. The carbohydrate matrix ensures hydration maintenance and mucous membrane adherence capabilities while optimizing biological material acceptance.
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-polyethyleneimine can be used for its potential to improve nucleic acid transfection efficiency using cationic polymer charge shielding.
Storage	Store at -20°C , protect from light and moisture.