

Product Information

PAA agent, Xylan-PEG-polyacrylic acid, Purity $\geq 95\%$

Cat. No.: X25-05-YM1043

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

Synonym: Xylan-PEG-polyacrylic acid; PAA-PEG-xylan

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

Product Information

Description	Xylan-PEG-polyacrylic acid creates a tri-component conjugate system formulated to integrate the renewable structural elements of xylan—a β -1,4-xylose-based biopolymer derived from plant hemicellulose decomposition—with PAA's molecular characteristics <i>via</i> PEG-mediated conjugation. The carbohydrate framework contributes water compatibility and mucosal adhesion capabilities that optimize biological system adaptability.
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-polyacrylic acid can be used for its potential to develop mucoadhesive hydrogels through polyacrylic acid charge density optimization.
Storage	Store at -20°C , protect from light and moisture.