

## Product Information

### His agent, Xylan-PEG-histidine, Purity $\geq 95\%$

**Cat. No.:** X25-05-YM1023

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

**Synonym:** Xylan-PEG-histidine; His-PEG-xylan

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

#### Product Information

<b>Description</b>	Xylan-PEG-histidine creates a ternary composite structure formulated to combine the sustainable carbohydrate matrix of xylan—a $\beta$ -1,4-xylose-based biopolymer obtained from plant hemicellulose sources—with histidine's molecular characteristics <i>via</i> PEG-mediated linkage. The polysaccharide component provides water compatibility and tissue adhesion properties that enhance biological interface acceptance.
<b>Molecular Formula</b>	0
<b>Glycan Structure</b>	Its glycan structure is a linear backbone of $\beta$ -1,4-linked D-xylose residues with side-chain substitutions including $\alpha$ -linked arabinofuranose, glucuronic acid/4-O-methyl-glucuronic acid, and acetyl groups at O-2 or O-3 positions.
<b>Source</b>	Chemical synthesis
<b>Form</b>	Solid or powder
<b>Purity</b>	$\geq 95\%$
<b>Impurities</b>	No visible impurities to the naked eye.
<b>Solubility</b>	This product is soluble in most organic solvents, such as DCM, DMF, DMSO, and THF, and exhibits excellent solubility in water.
<b>Identity</b>	Confirmed by NMR.
<b>Stability</b>	It is stable under its storage temperature.
<b>Quality Level</b>	Research grade
<b>Applications</b>	Xylan-PEG-histidine can be used for its potential to study pH-dependent endosomal escape mechanisms through histidine protonation assays.
<b>Storage</b>	Store at $-20^{\circ}\text{C}$ , protect from light and moisture.