SUPPORTING INFORMATION

Thiol-ene mediated neoglycosylation of collagen patches: a preliminary study

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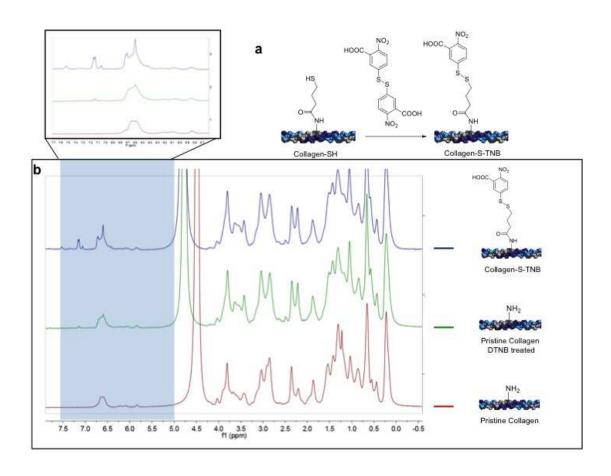


Figure S1. Full NMR spectra of the samples.

DTNB treatment was performed before and after the thiol-ene reaction; the spectra indicate the absence of additional aromatics due to TNB in the spectra of non thiolated collagen, and collagen after thiol-ene reaction (by peak integrals), demonstrating that the thiol-ene reaction is complete on thiol groups.

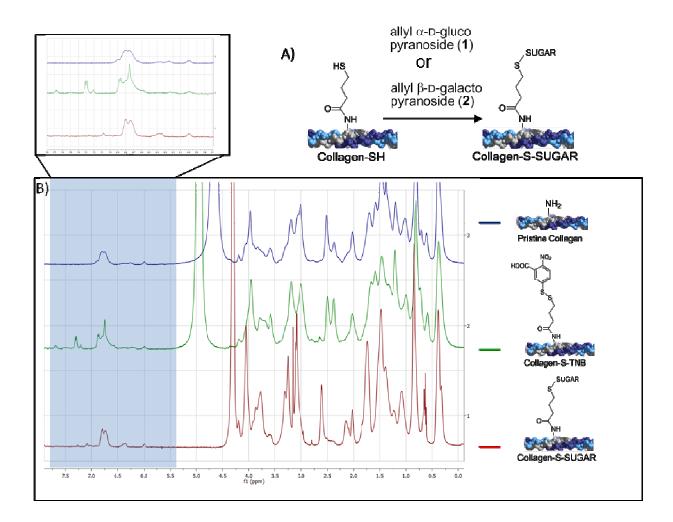


Figure S2. NMR spectra of collagen patches before and after the thiol-ene mediated neoglycosylation reaction.

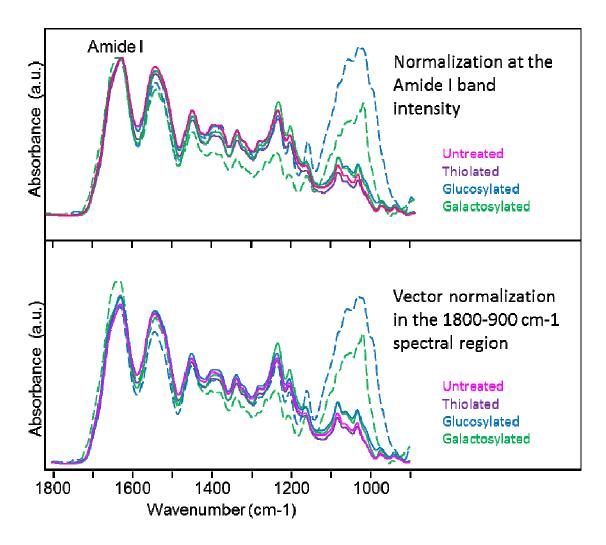


Figure S3. ATR-FTIR spectra of collagen samples reported after normalization at the Amide I band intensity (upper panel) and after vector normalization in the 1800-900 cm-1 spectral region (bottompanel).

Table S1. Full SR-XPS data

sample	signal	BE (eV)	FWHM (eV)	I _{ratio} (%)	I _{ratio} Relative	assignments
Thiolated collagen						
	C1s	285.00 286.35 287.82 289.00	1.34 1.34 1.34 1.34	80.0% 13.0% 4.8% 2.0%	33.8 5.4 2.0 1.0	C-C C-N, C-S C-OH O-C=O (collagen)
	N1s	399.10 401.31	2.07 2.07	75.0% 25.0%	3.0 1.0	R-NH ₂ ; R-NH-R' RNH ₂ ⁺ ; amide-like R-NH-C(O)-R'
	S2p _{3/2}	162.26	1.95	100%		S thiol (-CH ₂ -S-CH ₂ -)
	O1s	532.19 533.68	2.36 2.36	83.6% 16.4%	4.0 1.0	R-C=O; O-C=O* C-OH; O*-C=O
Glycosilated collagen (glucopyranose)						
	C1s	285.00 286.18 287.50 288.90	1.34 1.34 1.34 1.34	79.5% 14.3% 4.8% 1.4%	57.3 10.3 3.5 1.0	C-C C-N, C-S C-OH O-C=O (collagen)
	N1s	399.05 400.61	1.55 1.55	67.0% 33.0%	2.0	R-NH ₂ ; R-NH-R' RNH ₂ ⁺ ; amide-like R-NH-C(O)-R'
	S2p _{3/2}	162.47	1.75	100%		S thiol (-CH ₂ -S-CH ₂ -)
	O1s	532.24 533.52	2.35 2.35	71.3% 28.7%	2.5	R-C=O; O-C=O* C-OH; O*-C=O
Glycosylated collagen (galactopyranose)						
	C1s	285.00 286.29 287.69 288.75	1.33 1.33 1.33 1.33	81.8% 11.2% 5.2% 1.8%	45.4 6.2 3.0 1.0	C-C C-N, C-S C-OH O-C=O (collagen)
	N1s	399.16 400.89	2.07 2.07	75.3% 24.7%	3.0	R-NH ₂ ; R-NH-R' RNH ₂ ⁺ ; amide-like R-NH-C(O)-R'
	S2p _{3/2}	162.39	2.22	100%		S thiol (-CH ₂ -S-CH ₂ -)
	O1s	532.27 533.68	2.08 2.08	67.0% 33.0%	2.0	R-C=O; O-C=O* C-OH; O*-C=O