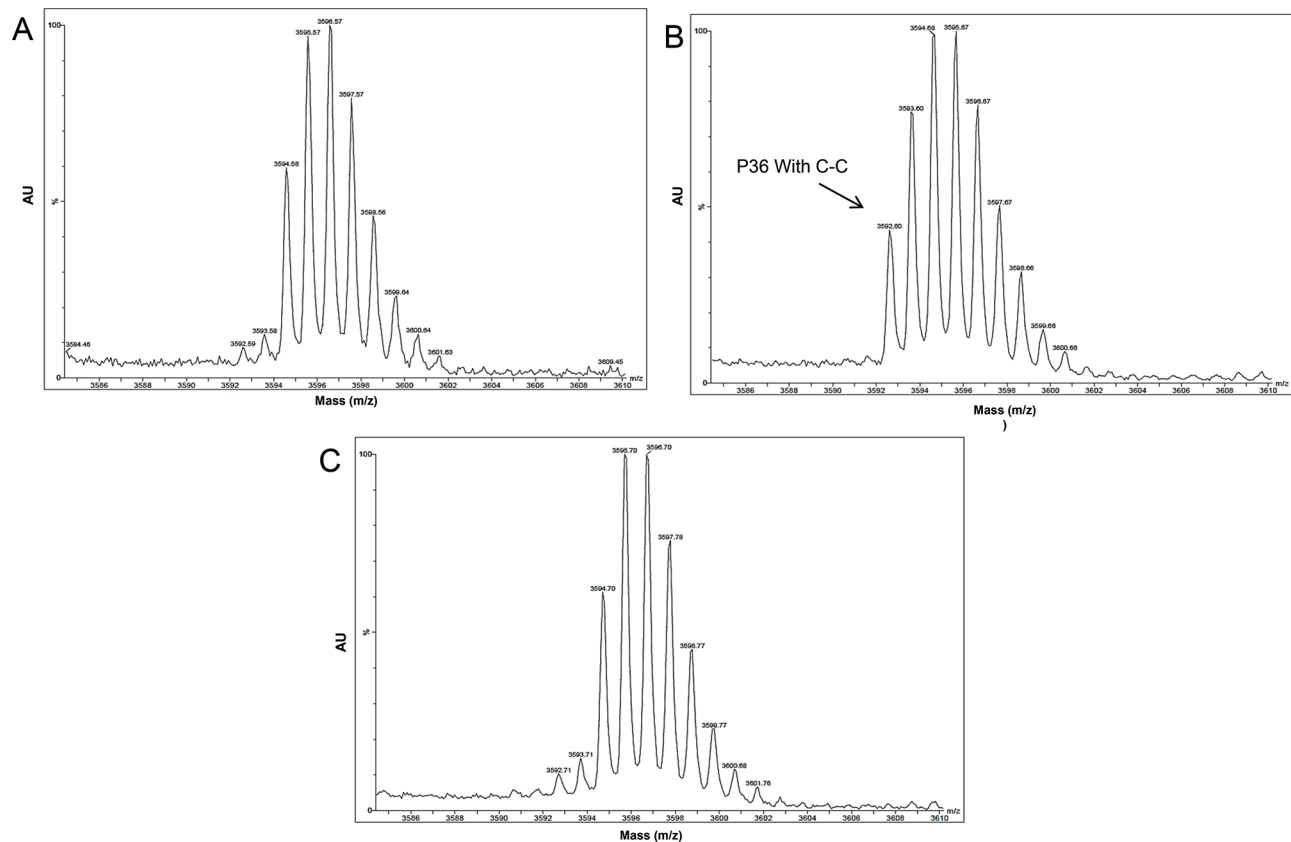


SUPPLEMENTARY FIGURE AND TABLES



Supplementary Figure S1: NC1(XIX) domain of collagen XIX makes disulfide bond in solution. (A) MALDI-ToF MS analysis showing that P36 peptide in solution at T0 presented no disulfide bond. **(B)** MALDI-ToF MS analysis at 1 h demonstrating that the P36 peptide of collagen XIX made a disulfide bond in its NC1(XIX) domain over the time. **(C)** MALDI-ToF MS analysis showing that in the presence of dithiothreitol (DTT), the disulfide bond disappeared

Supplementary Table S1: β -turn analysis of the trajectories

Peptides	Starting structure	Sequence of type I turn above threshold
P19	Elongated	SHAH ; HAHQ ; QRTG
	Itasser prediction	NPED ; LYPV ; VSHA ; QRTG
	Pepfold prediction	NPED ; PVSH ; VSHA ; AHQR ; RTGG
F4 without disulfide bridge	Elongated	SHAH
	Itasser prediction	NPED ; VSHA ; SHAH ; HAHQ
	Pepfold prediction	NPED ; SHAH
F4 with disulfide bridge	From Elongated start	NPED ; PEDC
	Pepfold prediction	NPED ; DCLY ; PVSH ; VSHA ; SHAH ; HAHQ ; AHQR

Supplementary Table S2: Sequences of the peptides used in the study

Names	Peptide sequences	Substitutions
P19	¹¹²⁴ NPEDCLYPVSHAHQRTGGN ¹¹⁴²	
P36	¹¹⁰⁷ SPGAPGPQPPGPSGRNPEDCLYPVSHAHQRTGGN ¹¹⁴²	
P36G ¹¹²²	¹¹⁰⁷ SPGAPGPQPPGPS <u>G</u> CNPEDCLYPVSHAHQRTGGN ¹¹⁴²	Arg ¹¹²² → Gly
P36W ¹¹²¹	¹¹⁰⁷ SPGAPGPQPPGPS <u>W</u> RNPEDCLYPVSHAHQRTGGN ¹¹⁴²	Gly ¹¹²¹ → Trp
P36W ¹¹²⁰	¹¹⁰⁷ SPGAPGPQPPGPS <u>W</u> GRCNPEDCLYPVSHAHQRTGGN ¹¹⁴²	Ser ¹¹²⁰ → Trp
P36W ¹¹²³	¹¹⁰⁷ SPGAPGPQPPGPSR <u>W</u> NPEDCLYPVSHAHQRTGGN ¹¹⁴²	Cys ¹¹²³ → Trp
P36W ¹¹²⁴	¹¹⁰⁷ SPGAPGPQPPGPSR <u>W</u> PEDCLYPVSHAHQRTGGN ¹¹⁴²	Asp ¹¹²⁴ → Trp