APPENDIX 1

Table A1. FTIR-ATR frequencies (cm^{-1}) for collagen and collagen like peptide

FTIR-ATR frequencies (cm^{-1})	**Assignments of specific features of IR absorption spectra**
1705	C=O in carboxylic acid (ROOH)
1600-1700	Amide I
1681	Contributions of C=O group of Y_{AA} and X_{AA} of X_{AA}-Y_{AA}-Gly unit
1659	Contributions of C=O group of Y_{AA} and C=O in the peptide bond preceding Gly of X_{AA}-Y_{AA}-Gly unit
1619	Contributions of C=O group of X_{AA} and Gly of X_{AA}-Y_{AA}-Gly unit
1546	NH deformation of amide I (R-NH-R')
1500-1600	Amide II, N-H stretching vibration coupled with C-N stretching vibration of peptide groups
1545	Amide II , stretching vibration of aspartate, glutamate and arginine
1200-1400	Amide III, Combination of C-N stretching and N-H in-plane bending from peptide groups
1620	Amide III, stretching vibrations of tyrosine
1457	C-N stretching vibration of cyclic proline
1452	CH_2 scissoring and CH_3 asymmetric bending vibrations
1404	COO^- symmetric stretching vibrations of amino acid side chains
1337	CH_2 wagging vibrations of proline residues
1282, 1233, 1200	Predominant absorption bands seen in collagen
1695,1670, 1620	Antiparallel β-sheet (Amide I)
1618-1623	Intermolecular aggregates (Amide I)
1685	Turns (Amide I)
1651	α-helix (Amide I)