

Supplementary Material

Microstructural analysis of whey/soy mixed protein gels using confocal Raman microscopy

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Table S1. Assignments of bands from protein gels

SPI100	WPI100	Identification
3419, 3284	3420, 3283	H ₂ O
3065	3074	
2937	2939	$\nu(-\text{CH}_3)$, $\nu(-\text{CH}_2)$, $\nu(-\text{CH})$
2431	2433	
1669	1672	Amide I (C=O stretch, N-H wagging)
1613	(1624)	
-	1559, 1523	(See main manuscript for potential attributions)
1455	1458	$\delta(-\text{CH}_3)$, $\delta(-\text{CH}_2)$, $\delta(-\text{CH})$
1250	1252	Amide III
1005	1009	Phe ν -ring (Phenylalanine ring breathing)

ν , stretching; δ , deformation; Phe, phenylalanine

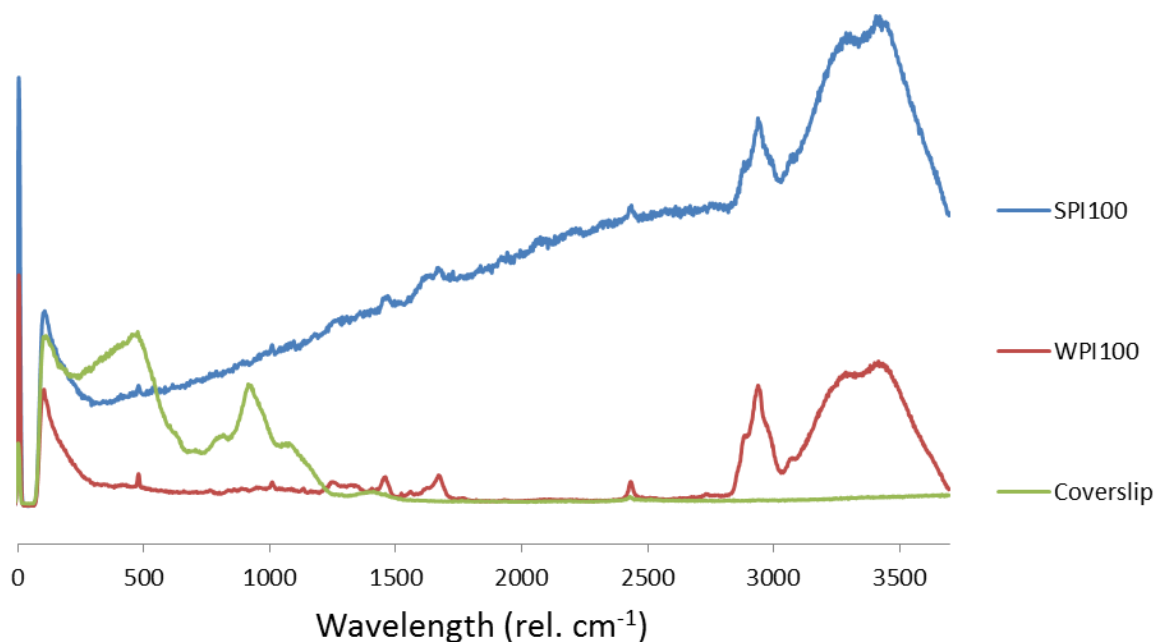


Figure S1. Raw Raman spectra of heat-set hydrogels prepared with whey protein isolate (WPI100) and soy protein isolate (SPI100), and of a glass coverslip.

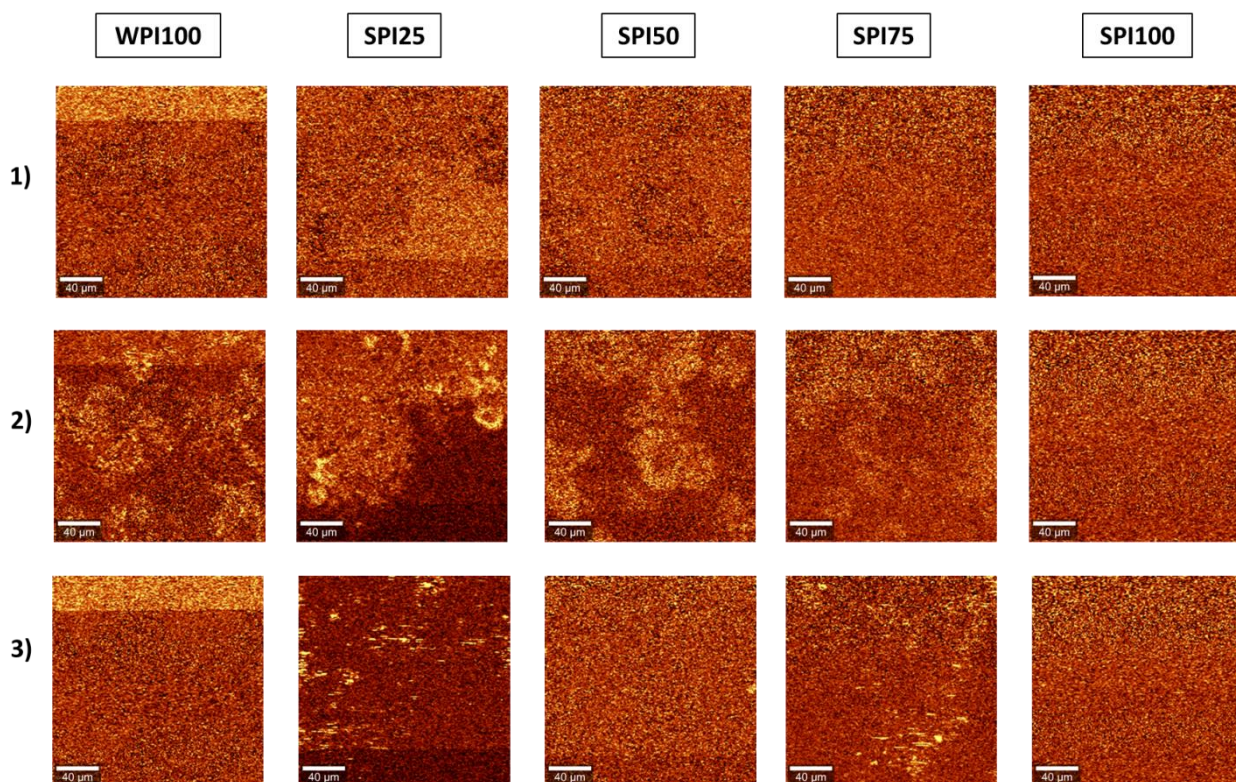


Figure S2. Monochromatic Raman images of protein gels obtained through univariate data analysis using filters for the bands centred at 1523 rel. cm^{-1} (1), 1559 rel. cm^{-1} (2) and 1765 rel. cm^{-1} (3). All scale bars correspond to 40 μm .

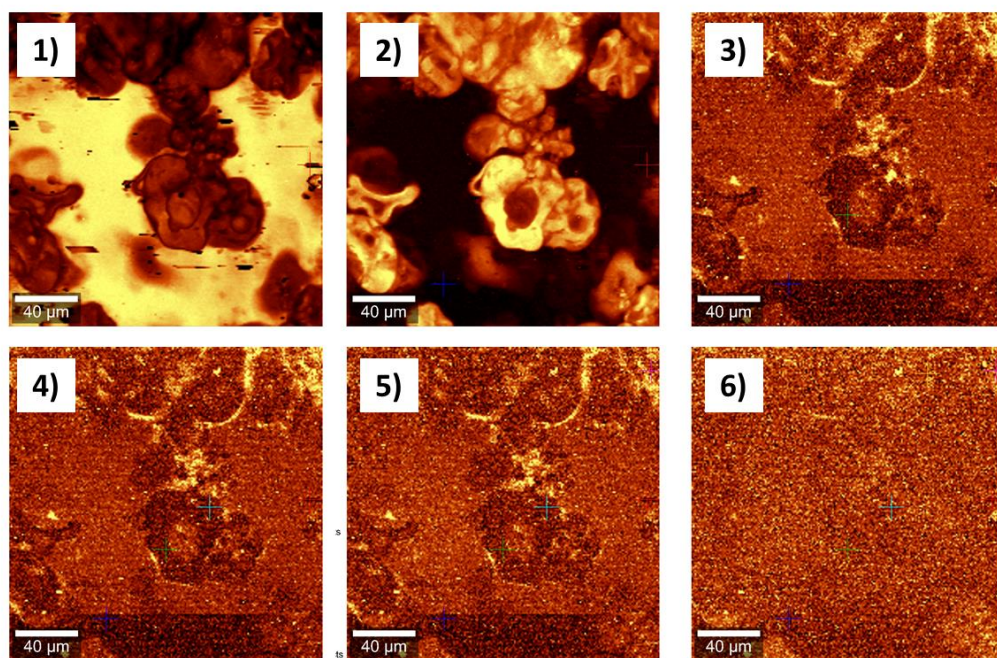


Figure S3. Residual images obtained for SPI50 after extracting 1, 2, 3, 4, 5 and 6 components from the dataset using the multivariate analysis method without the input of reference spectra