Supplementary Table S.2: Raman peak assignment for principal component 2 (PC2). Only main spectral contributors to the PC are listed.

	Assignment			
Raman Shift (cm^{-1})	**Nucleic Acid**	**Protein**	**Lipid**	**Carbohydrate**
666	G, T[1,2]			
714			cho.[1]	
			C-N str.[3]	
726	A[1]			
784	C, U[3]			
855	O-P-O str.[4]	tyr. rb.[1]		
927		C-C bk. α[5]		
1004		phe. sym. rb.[1]		
1071		C-N str.[4]	C-C str.[1]	
1134		C-N str.[4]	C-C str.[1,4]	
1178	DNA/RNA ring	phe. ring str.[6]		
	vib.[6]	C-H bd. tyr.[4,6]		
1235		am III rc.[4]		
1272		am III α[4,5]		
1297		am III α[4]	CH def.[4]	
1338	CH_3CH_2 wg.[3]			
1373	T[1]			
	A, G[2]			

	Assignment			
Raman Shift (cm^{-1})	**Nucleic Acid**	**Protein**	**Lipid**	**Carbohydrate**
1438			CH_2 def.[1]	
1577	A, G[1]			
1618		tyr.[7]		
		trp.[3]		
1659		am. I α[3]	C=C str.[3]	
1682		am. I β[5]		

Guanine (G), thymine (T), choline (cho), stretch (str), adenine (A), cytosine (C), uracil (U), tyrosine (tyr), ring breathing (r.b.), backbone (bk.), α helix (α), phenylalanine (phe), symmetric (sym), vibration (vib), bending (bd), wagging (wg), deformation (def), tryptophan (trp), amide (am), β sheet (β), random coil (rc).

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