

Supplementary information:

Raman micro spectroscopy study of the interaction of vincristine with A549 cells supported by expression analysis of bcl-2 protein

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Spectral ranges (cm⁻¹)

assignments

621-626	C-C twisting of phenyl
629-633	C-C stretching
635-637	C-C stretching
637-643	C-C stretching of tyrosine residues
655-656	alanine
673-678	thymine
696-700	tryptophan ring breathing
703-704	tryptophan
708-711	tyrosine
719-727	Adenine/tryptophan
733-737	thymine
748-750	thymine
763-766	thymine
769-773	alanine
773-778	tryptophan
784-795	cytosine
797-808	O-P-O of DNA (A-form)
828-829	O-P-O of DNA (B-form)
842-844	CH in plane bending of tyrosine
849-857	C-C stretching
861-864	tryptophan
893-898	Deoxiribose of DNA
904-906	valine
936-939	C-C stretching
944-947	valine
1000-1007	Phenyl alanine
1021-1026	CH in plane bending
1030-1033	CH in plane bending

1055-1058	C-N stretching
1062-1065	O-P-O of the DNA
1075-1090	O-P-O of the DNA
1114-1121	C-N stretching
1142-1148	C-C stretching
1166-1173	cytosine
1176-1177	CH in plane bending of tyrosine
1194-1196	tyrosine
1209-1211	guanine
1251-1257	thymine
1250-1256	amide-III
1261-1261	Amide-III β -sheet
1263-1271	Amide-III β -sheet
1276-1280	Amide-III α -sheet
1289-1309	cytosine
1320-1322	guanine
1331-1332	tryptophan
1347-1360	CH ₃ stretching
1340-1343	CH deformation
1378-1381	thymine
1424-1428	CH deformation
1453-1461	CH deformation
1468-1470	histidine
1503-1505	C=C stretching
1545-1559	tryptophan
1566-1572	tryptophan
1596-1597	C=C bending
1631-1633	histidine
1643-1645	C=C stretching
1663-1665	amide-I
1702-1709	thymine
1727-1731	C=O ester

1783-1786

C-C bending