Supporting information

Use of hyphenated analytical techniques to identify the bioactive constituents of *Gunnera perpensa* L., a South African medicinal plant, which potently inhibit SARS-CoV-2 spike glycoprotein – host ACE2 binding

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Table S1 Summary of IC_{50}s for extracts, fractions and pure compounds in the RBD-ACE2 AlphaScreen assay.

Sample	IC_{50} (µg/ml)
DCM : MeOH extract (*G.perpensa*)	<0.001
Fraction 1	>32
Fraction 2	0.0021
Fraction 3	<0.001
Fraction 4	<0.001
Fraction 5	0.0034
Fraction 6	<0.001
Fraction 7	<0.001
Subfraction 1	29.8
Subfraction 2	0.012
Subfraction 3	0.0018
Subfraction 4	0.0045
Subfraction 5	0.0078
Subfraction 6	0.0053
Subfraction 7	0.0034
Subfraction 8	0.0028
Subfraction 9	0.069
Subfraction 10	0.0017
Subfraction 11	0.00050
Subfraction 12	0.013
Subfraction 13	0.0073
REGN10987	0.025 (0.18*)
Punicalin	9*
Punicalagin	29*

*IC_{50} (nM)

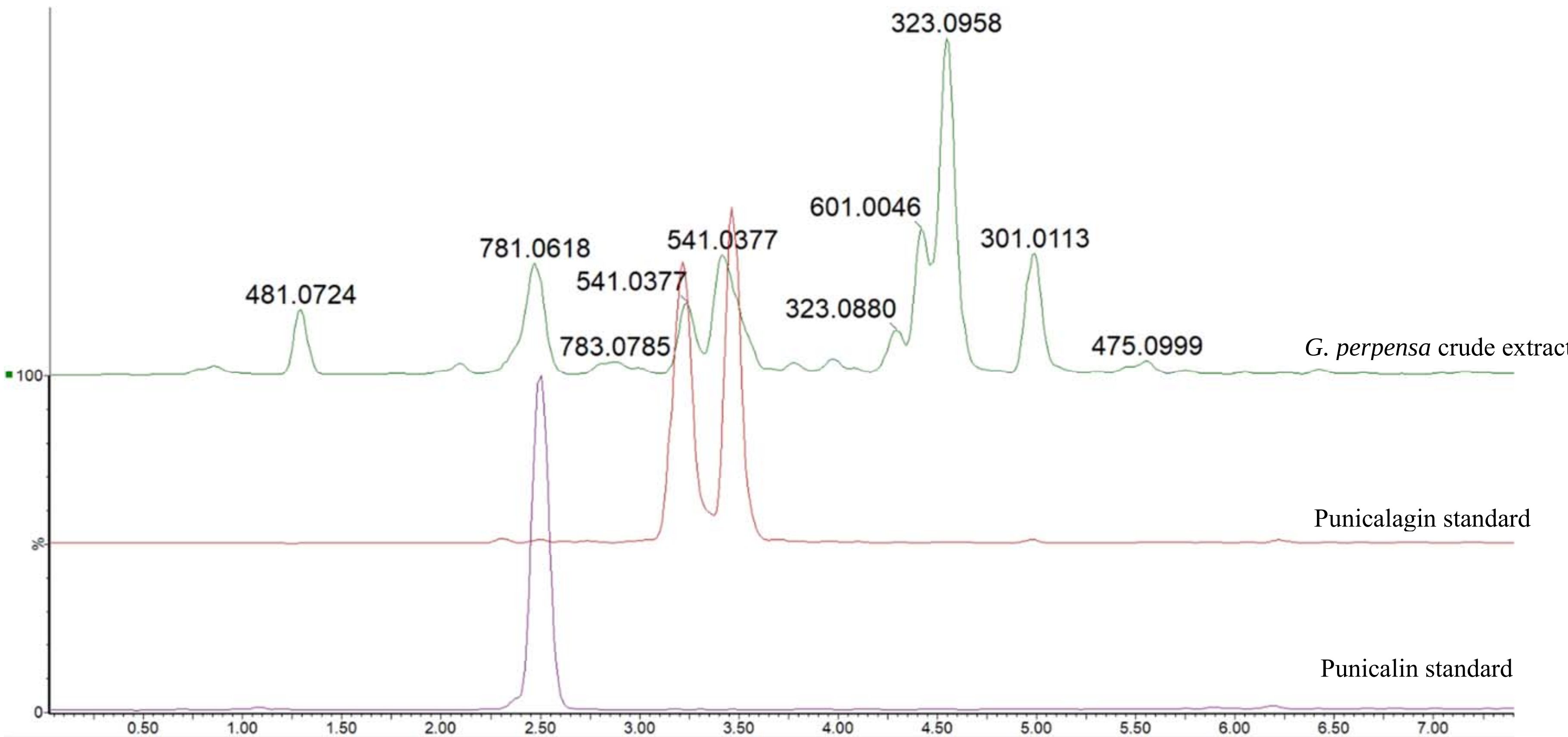

Fig. S1 BPI chromatogram of the DCM : MeOH *G. perpensa* extract, punicalin and punicalagin standard illustrating similar retention times.

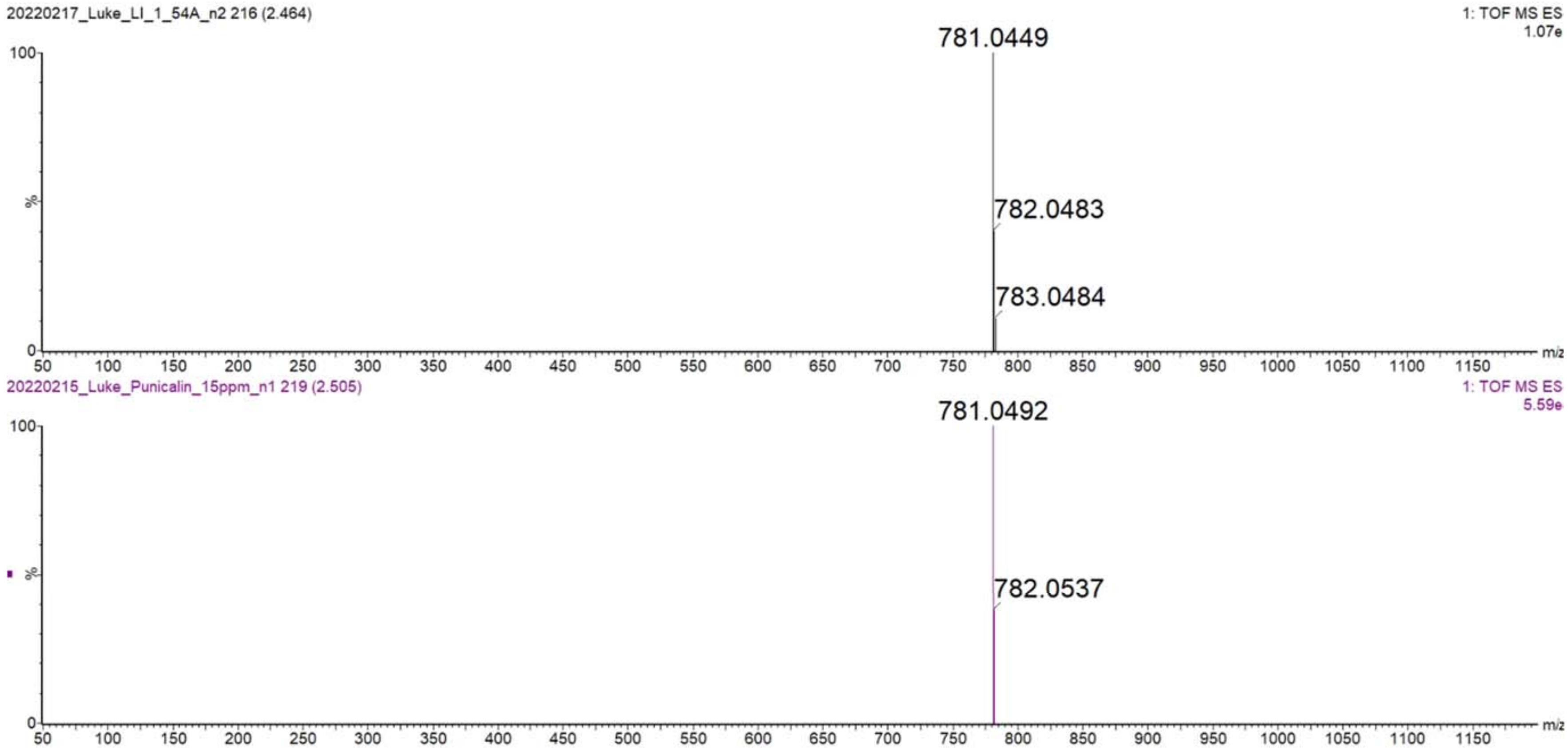

Fig. S2 MS spectra of punicalin in the crude *G. perpensa* extract (top) and punicalin standard (bottom) illustrating matching spectra.

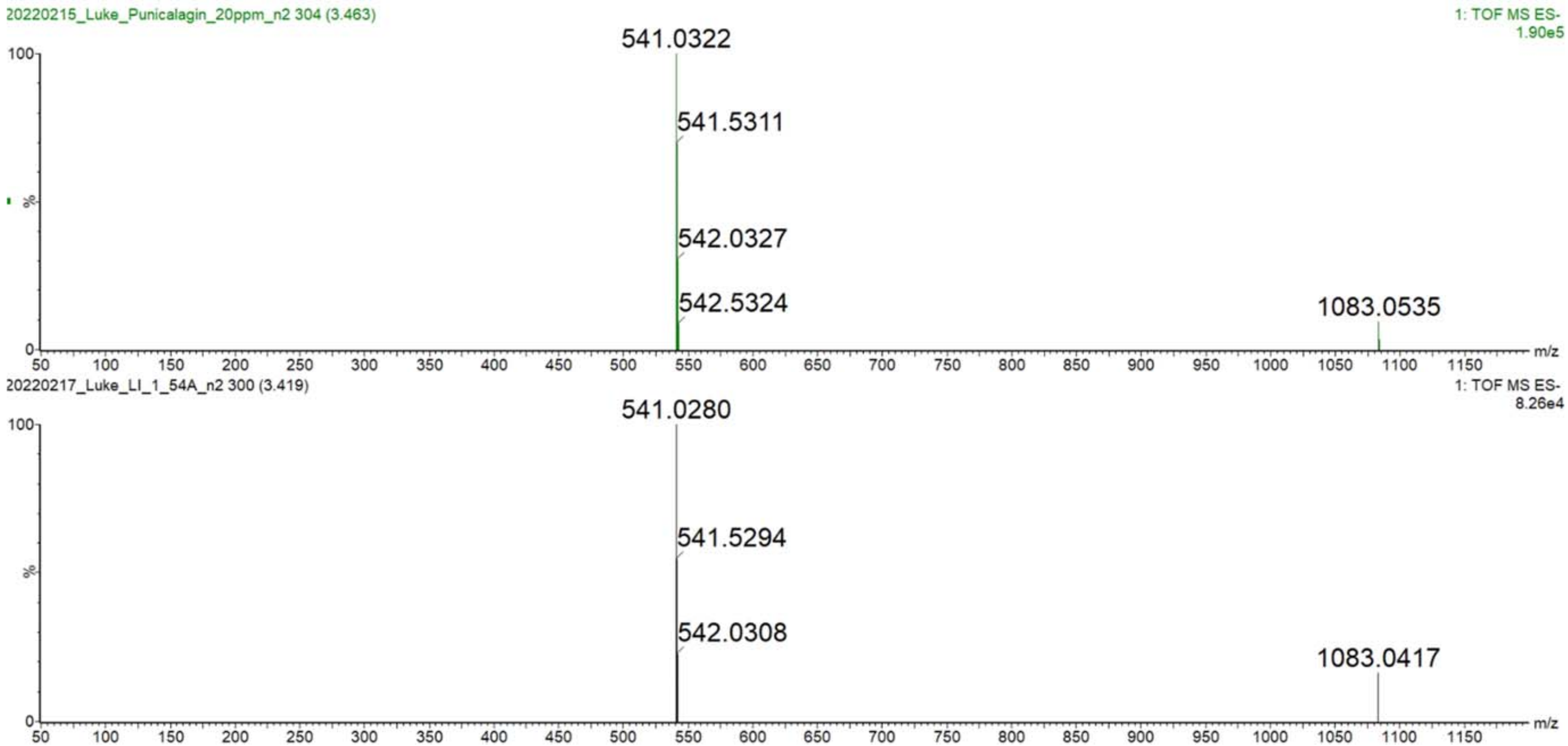

Fig. S3 MS spectra of punicalagin in the crude *G. perpensa* extract (top) and punicalagin standard (bottom) illustrating matching spectra.

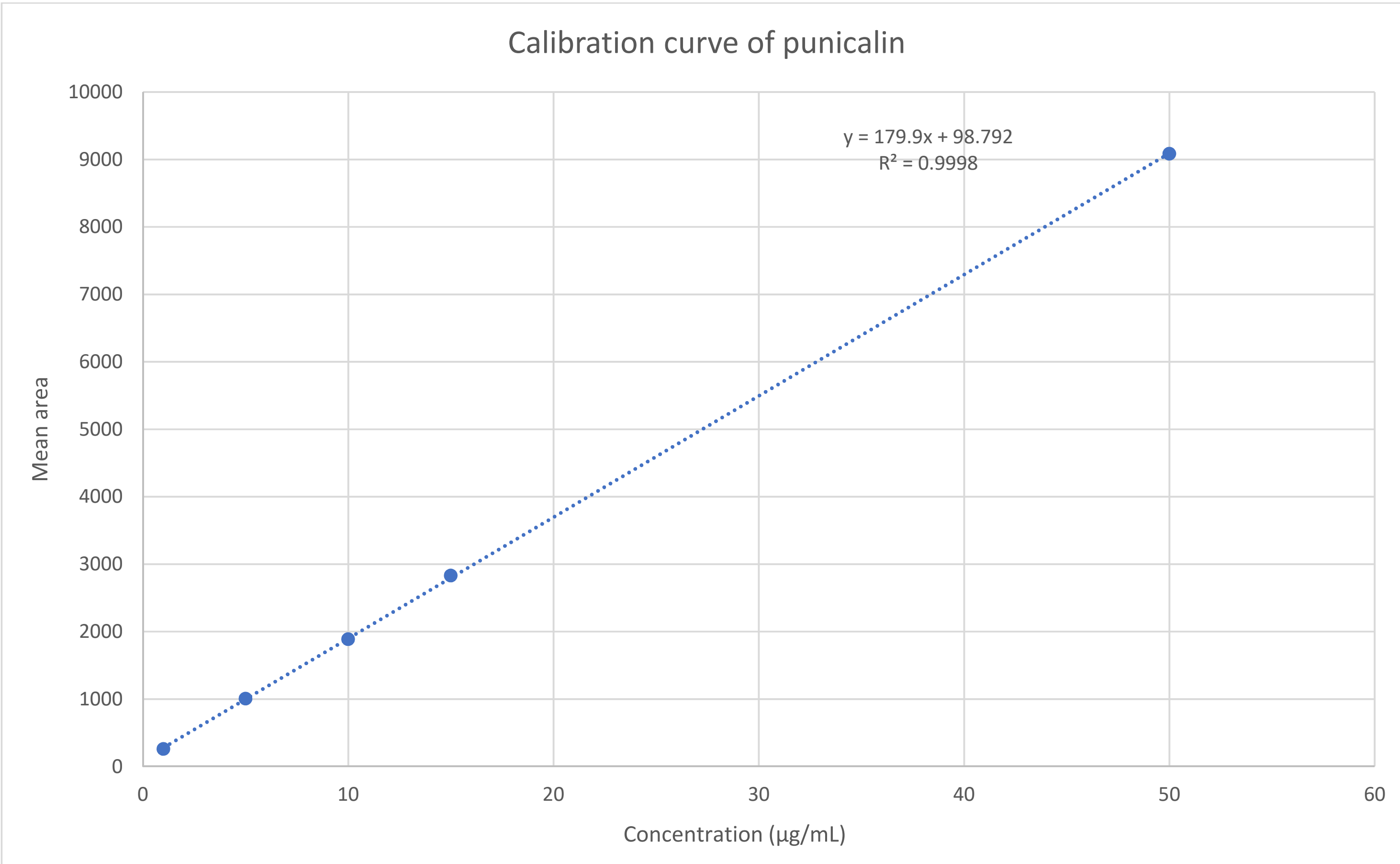

Fig. S4 Calibration curve of punicalin.

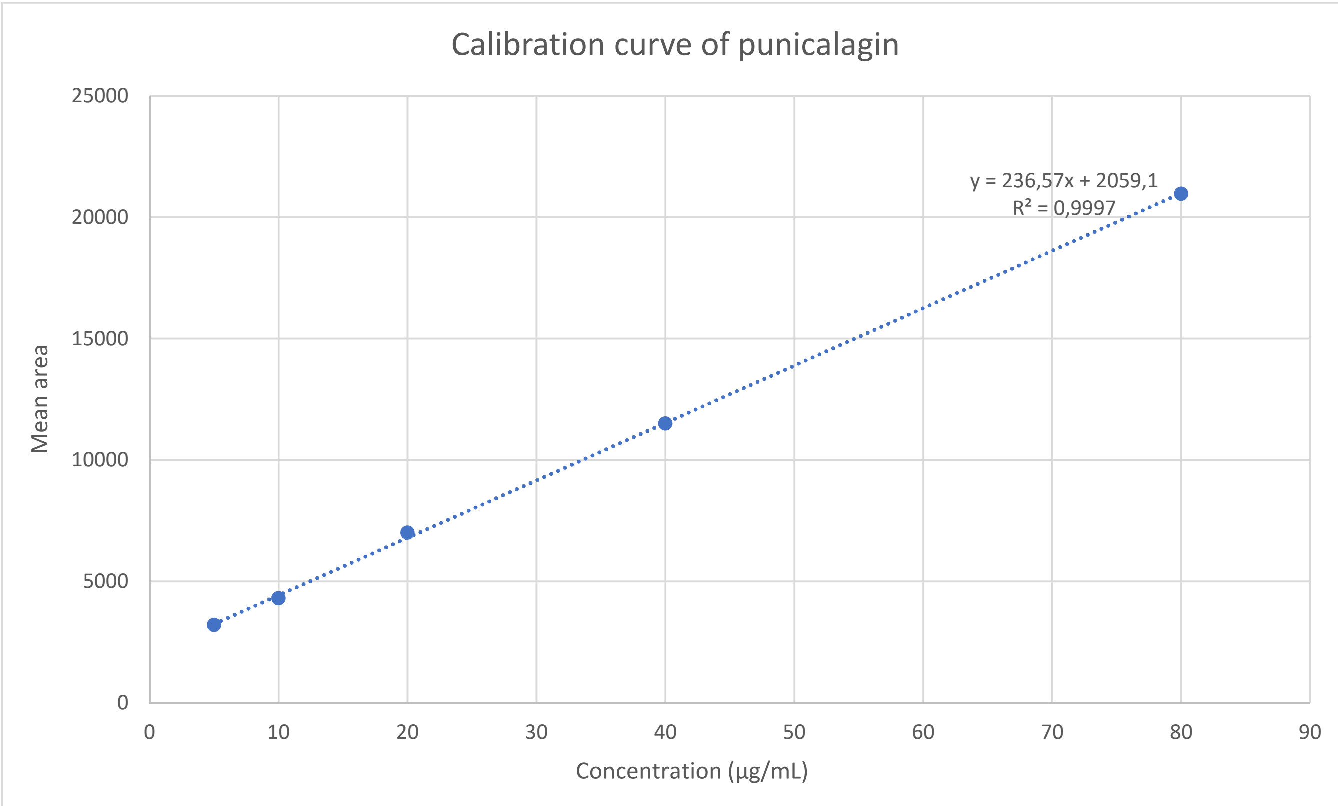

Fig. S5 Calibration curve of punicalagin

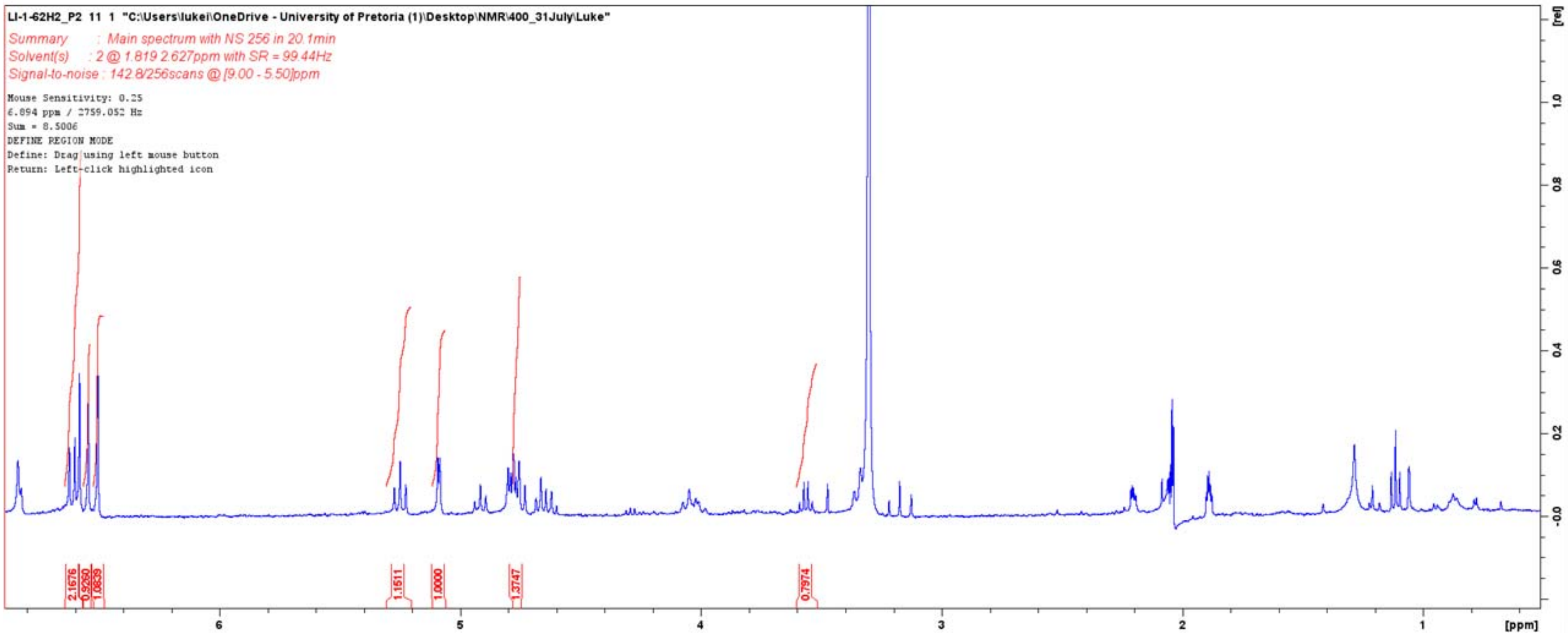

Fig. S6 ^{1}H NMR spectra of punicalagin in acetone-d6, analysed on a Bruker 400 MHz NMR.