**Supplementary Information for review (**$\delta_H$, $\delta_C$ and HRMS spectrums of cyantraniliprole hapten**)**

# Development of a Monoclonal Antibody-Based ELISA for the Detection of the Novel Insecticide Cyantraniliprole

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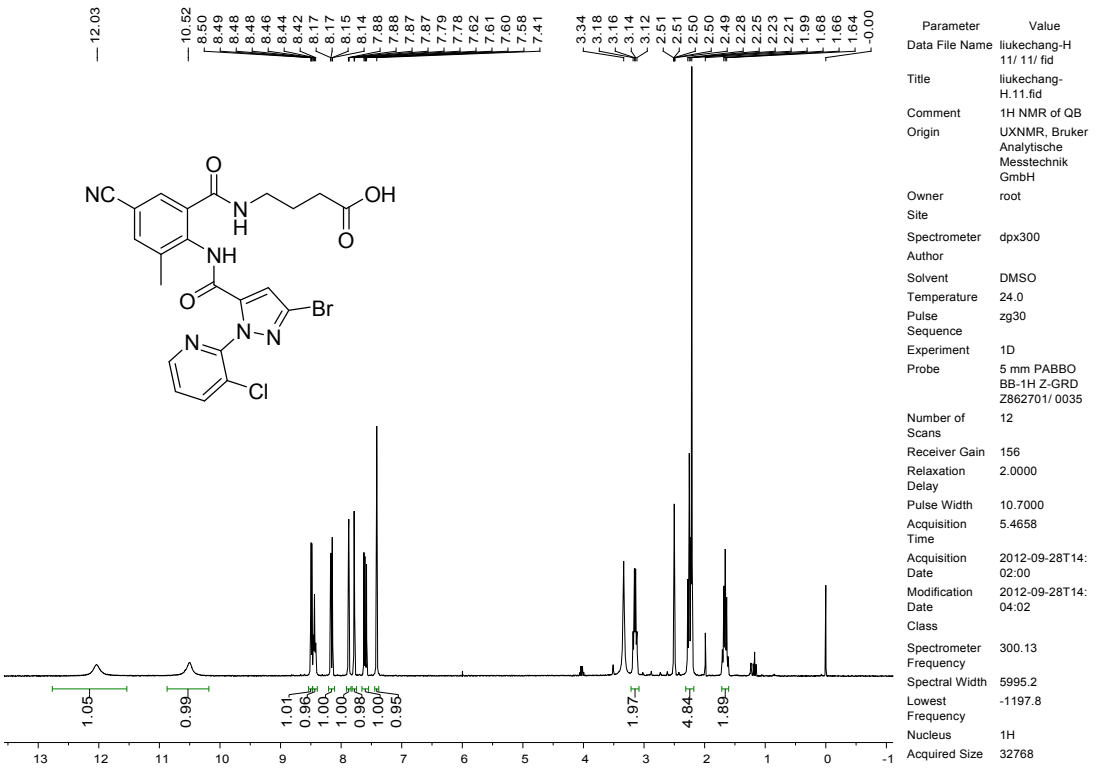


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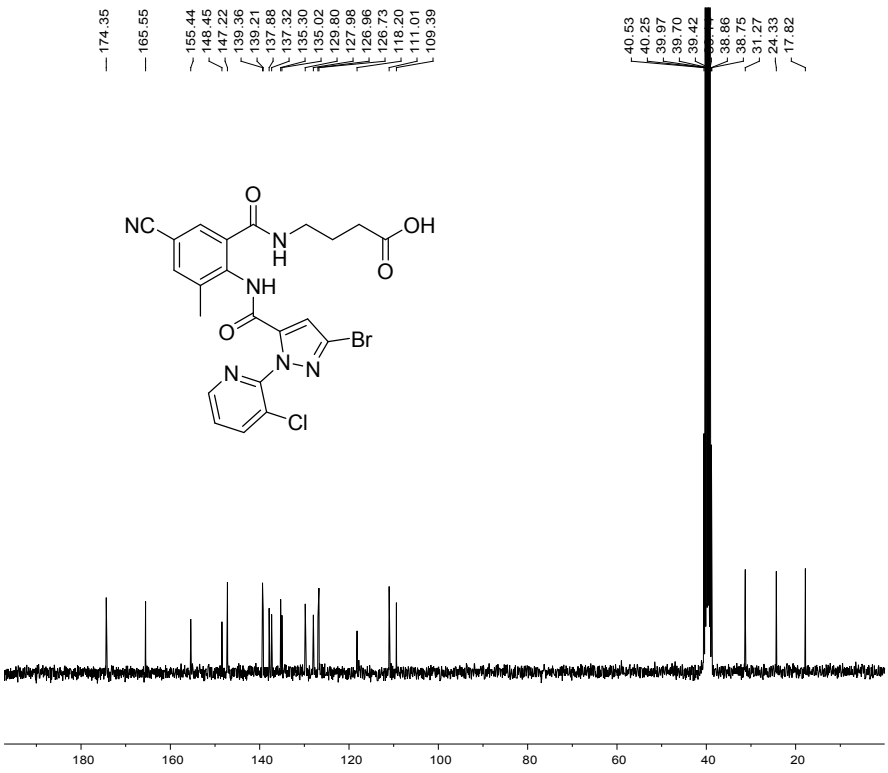
| Data File Name | liukechang-H 11/ 11/ fid |
| Title | liukechang-H.11.fid |
| Comment | 1H NMR of QB |
| Origin | UXNMR, Bruker Analytische Messtechnik GmbH |
| Owner | root |
| Site | |
| Spectrometer | dpx300 |
| Author | |
| Solvent | DMSO |
| Temperature | 24.0 |
| Pulse Sequence | zg30 |
| Experiment | 1D |
| Probe | 5 mm PABBO BB-1H Z-GRD Z862701/ 0035 |
| Number of Scans | 12 |
| Receiver Gain | 156 |
| Relaxation Delay | 2.0000 |
| Pulse Width | 10.7000 |
| Acquisition Time | 5.4658 |
| Acquisition Date | 2012-09-28T14: 02:00 |
| Modification Date | 2012-09-28T14: 04:02 |
| Class | |
| Spectrometer Frequency | 300.13 |
| Spectral Width | 5995.2 |
| Lowest Frequency | -1197.8 |
| Nucleus | 1H |
| Acquired Size | 32768 |

$\delta_H$ (300 MHz, DMSO) : 1.64 - 1.68 (2H, m,CH2CH2CH2), 2.21 - 2.28 (5H, m, CH2 and CH3), 3.12 - 3.18 (2H, m, NHCH2), 7.41 (1H, s, Py-H), 7.58 – 7.62 (1H, m, CONHCH2), 7.78 (1H,d, J = 1.8 Hz, Ar-H), 7.88 (1H,d, J = 1.8 Hz, Ar-H), 8.14 – 8.17 (1H,m,Py-H), 8.42 – 8.46 (1H,m, Py-H), 8.48 – 8.50 (1H, m, Py-H), 10.52 (1H, br s, NHCO), 12.03 (1H, br s, COOH)




| Parameter | Value |
|---|---|
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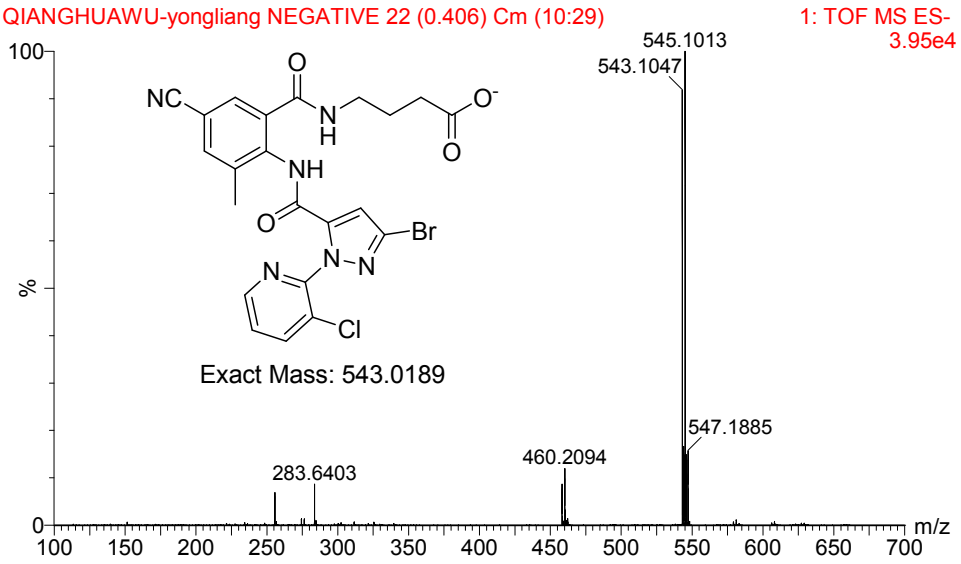
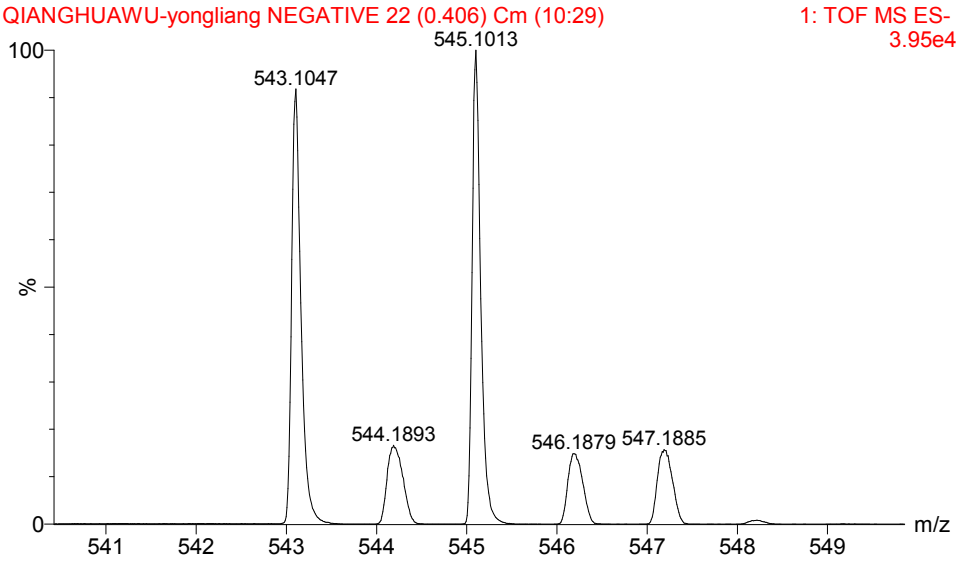
| Title | liukechang-13C. 1.fid |
| Comment | 13C NMR of QB |
| Origin | UXNMR, Bruker Analytische Messtechnik GmbH |
| Owner | root |
| Site | |
| Spectrometer | dpx300 |
| Author | |
| Solvent | DMSO |
| Temperature | 24.0 |
| Pulse Sequence | zgdc30 |
| Experiment | 1D |
| Probe | 5 mm PABBO BB-1H Z-GRD Z862701/ 0035 |
| Number of Scans | 942 |
| Receiver Gain | 7168 |
| Relaxation Delay | 1.5000 |
| Pulse Width | 12.0000 |
| Acquisition Time | 1.4451 |
| Acquisition Date | 2012-09-28T17: 31:00 |
| Modification Date | 2012-09-28T18: 08:52 |
| Class | |
| Spectrometer Frequency | 75.48 |
| Spectral Width | 22675.7 |
| Lowest Frequency | -3816.1 |
| Nucleus | 13C |
| Acquired Size | 32768 |
| Spectral Size | 65536 |

$\delta_C$ (75 MHz, DMSO) : 17.82, 24.33, 31.27, 38.75, 109.39, 111.01, 118.20, 126.73, 126.96, 127.98, 129.80, 135.02, 135.30, 137.32, 137.88, 139.21, 139.36, 147.22, 148.45, 155.44, 165.44, 174.35.




HRMS (ESI): calc. $C_{22}H_{17}BrClN_6O_4$ $[M-H]^-$ for 543.0189, found 543.1047.