**Table S5. Information of the stability test**

|  |  |  |  |
| --- | --- | --- | --- |
| Peak ID | Retention time (min) | *m/z* | Intensity |
| QC-1 | QC-2 | QC-3 | QC-4 | QC-5 | QC-6 | QC-7 | QC-8 | QC-9 |
| 1 | 26.00 | 758.5689 | 227911185.5  | 237963104.4  | 227762005.1  | 234633308.6  | 239293740.0  | 232927713.7  | 232073275.4  | 230018363.9  | 235214590.1  |
| 2 | 24.39 | 782.5677 | 83350263.8  | 87051127.2  | 82708350.1  | 82752225.5  | 86744899.4  | 84989013.9  | 84531791.4  | 82075762.8  | 87743002.1  |
| 3 | 22.81 | 805.5597 | 46560757.5  | 47508487.2  | 45604868.0  | 46254844.5  | 49605568.6  | 47870992.4  | 46780443.9  | 45452166.1  | 47311877.0  |
| 4 | 24.49 | 702.5667 | 40883426.8  | 41424605.9  | 39704200.3  | 39984821.3  | 41295322.7  | 40503095.5  | 41023115.4  | 39926866.1  | 42040818.2  |
| 5 | 12.26 | 495.3330 | 26777954.3  | 28020917.2  | 28216206.7  | 26704312.8  | 27426839.6  | 26506185.9  | 24608496.4  | 26394676.2  | 26878040.1  |
| 6 | 14.07 | 523.3645 | 13621045.7  | 14321370.3  | 14778820.5  | 13065422.7  | 13118021.1  | 13222862.9  | 12864071.5  | 12983291.0  | 12889084.6  |
| 7 | 27.35 | 834.5999 | 11857120.8  | 12487016.3  | 11465236.8  | 11941642.0  | 12283815.2  | 12075947.3  | 11688129.8  | 11730476.1  | 12230901.9  |
| 8 | 25.95 | 848.5383 | 11092337.8  | 10426517.6  | 10995888.4  | 10908770.7  | 9906528.1  | 9600814.1  | 9420014.1  | 9279560.3  | 9274091.6  |
| 9 | 25.60 | 765.5637 | 8103341.7  | 8229067.9  | 8050979.2  | 8313142.0  | 8246076.0  | 8147177.3  | 7790251.0  | 8035303.2  | 8183689.7  |
| 10 | 27.35 | 767.5818 | 7013945.1  | 7234016.5  | 6920304.2  | 7077288.3  | 7529383.3  | 7328041.0  | 7024726.2  | 7017770.3  | 7431916.6  |
| Peak ID | Sample ID | *m/z* | Intensity |
| QC-10 | QC-11 | QC-12 | QC-13 | QC-14 | QC-15 | QC-16 | QC-17 | QC-18 |
| 1 | 26.00 | 758.5689 | 247291163.5  | 233988911.1  | 231770784.3  | 241119859.0  | 240607164.2  | 234495706.3  | 242515297.6  | 246445215.5  | 251527216.7  |
| 2 | 24.39 | 782.5677 | 86575295.4  | 82679348.9  | 83086816.9  | 87281886.3  | 88317569.1  | 85224795.9  | 89604991.6  | 87810726.9  | 88243221.2  |
| 3 | 22.81 | 805.5597 | 47461977.5  | 46603538.7  | 47318575.2  | 48671039.4  | 50104736.4  | 46857398.2  | 48951218.0  | 48567664.5  | 49404301.9  |
| 4 | 24.49 | 702.5667 | 42071513.4  | 41156146.4  | 40481683.9  | 42279415.5  | 42478856.6  | 41324687.8  | 43093165.7  | 42787481.2  | 43126842.5  |
| 5 | 12.26 | 495.3330 | 26520106.1  | 25907662.9  | 25323321.6  | 24732798.7  | 27247549.3  | 25031202.7  | 27447224.3  | 26477316.3  | 27214464.8  |
| 6 | 14.07 | 523.3645 | 13738878.7  | 12961641.1  | 13460056.1  | 13609120.0  | 14321334.2  | 13615736.2  | 14054675.9  | 13405434.0  | 13511402.9  |
| 7 | 27.35 | 834.5999 | 12176678.6  | 11858379.8  | 11600061.0  | 12034237.1  | 13002473.6  | 11645918.8  | 13261178.5  | 12604200.7  | 12686759.0  |
| 8 | 25.95 | 848.5383 | 9625724.0  | 9393591.8  | 9468043.9  | 9964517.4  | 9950615.2  | 9844195.0  | 9777191.0  | 10365169.5  | 10409507.4  |
| 9 | 25.60 | 765.5637 | 8532488.0  | 8091101.7  | 7894700.8  | 8437875.1  | 8428498.3  | 8152028.1  | 8139022.6  | 8564814.9  | 8766336.5  |
| 10 | 27.35 | 767.5818 | 7198517.0  | 7104874.1  | 7121931.4  | 7336807.7  | 7833131.7  | 7191519.0  | 8112635.6  | 7745280.6  | 7797358.7  |
| Peak ID | Sample ID | *m/z* | Intensity |
| QC-19 | QC-20 | QC-21 | QC-22 | QC-23 | QC-24 | QC-25 | QC-26 |  |
| 1 | 26.00 | 758.5689 | 249135059.9  | 244989974.2  | 241108639.0  | 260851523.2  | 251254476.6  | 247456579.1  | 249184345.9  | 257043955.8  |  |
| 2 | 24.39 | 782.5677 | 90272138.9  | 88554493.5  | 84489840.2  | 86599279.5  | 84682864.2  | 82122069.6  | 81177413.5  | 84328119.9  |  |
| 3 | 22.81 | 805.5597 | 47601338.1  | 49493743.1  | 45598497.7  | 46088568.8  | 43273833.1  | 41532891.2  | 42270434.7  | 42280055.2  |  |
| 4 | 24.49 | 702.5667 | 43359567.2  | 42976910.9  | 42037838.4  | 44316382.8  | 42992954.9  | 41564345.3  | 41607218.0  | 43003975.4  |  |
| 5 | 12.26 | 495.3330 | 26754288.7  | 25423944.6  | 25414940.4  | 28485594.6  | 26734325.2  | 27576732.3  | 26471825.7  | 27542248.6  |  |
| 6 | 14.07 | 523.3645 | 13523656.2  | 12487606.9  | 14644115.2  | 14578539.9  | 13090330.1  | 14640527.1  | 13319546.6  | 14161777.9  |  |
| 7 | 27.35 | 834.5999 | 13173065.3  | 12830421.4  | 11841467.4  | 12754270.7  | 12137824.2  | 11296910.7  | 11351817.8  | 11927728.4  |  |
| 8 | 25.95 | 848.5383 | 10313001.0  | 10390497.3  | 10297688.2  | 11002541.6  | 10872865.9  | 10780483.3  | 10833543.9  | 11662834.6  |  |
| 9 | 25.60 | 765.5637 | 8257616.5  | 8276000.8  | 8103757.1  | 8717521.9  | 8109296.1  | 8230778.3  | 8175307.8  | 8387359.0  |  |
| 10 | 27.35 | 767.5818 | 8024807.0  | 7892082.0  | 7284046.5  | 7871244.2  | 7623125.1  | 7074161.6  | 7079913.3  | 7400370.3  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Peak ID | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Average | 241099352.3 | 85499896.44 | 46731916.04 | 41824817.62 | 26609199.08 | 13614937.28 | 12151679.97 | 10225251.29 | 8244751.209 | 7394969.13 |
| STD | 8954267.622 | 2562693.719 | 2314637.346 | 1191324.497 | 1044709.794 | 639981.2513 | 552331.8555 | 656308.2638 | 228793.1322 | 356176.5899 |
| RSD% | 3.713932675 | 2.997306226 | 4.953011864 | 2.848367464 | 3.926122659 | 4.700581708 | 4.54531272 | 6.418504984 | 2.775015599 | 4.816471626 |