

Table S1A. gradient elution condition

| Time(min) | Gradient |
|-------------|----------|
| 0-10min | 2% B |
| 10-10.01min | 2-5% B |
| 10.01-37min | 5-20% B |
| 37-48min | 20-40% B |
| 48-48.01min | 40-90% B |
| 48.01-58min | 90% B |
| 58-58.01min | 90-2% B |
| 58.01-63min | 2% B |

Table S1B. DDA mass spectrometry conditions

| Items | Value |
|------------------|-------------|
| Ion Mobility | 0.85-1.3 |
| Capillary | 1.4KV |
| Mass Range | 100-1700m/z |
| Dry Temperature | 180°C |
| Collision Energy | 20-59eV |
| Dry Gas | 3.0L/min |

Table S1C. DIA mass spectrometry conditions

| Items | Value |
|------------------|-------------|
| Ion Mobility | 0.7-1.3 |
| Capillary | 1.4KV |
| Mass Range | 100-1700m/z |
| Dry Temperature | 180°C |
| Collision Energy | 20-59eV |
| Dry Gas | 3.0L/min |