**Table S2** Summary of validated HPLC method for estimation of PLGN

|  |  |  |
| --- | --- | --- |
| Parameters | Values | % RSD |
| Linearity and range |  |  |
| Regression equation | y = 349329.568 x - 272061.184 |  |
| Correlation coefficient (r2) | 0.996 |  |
| Range | 2 to 30 µg/mL |  |
| Accuracy |  |  |
| 50% level | 105.986 | 0.425 |
| 100% level | 99.976 | 0.201 |
| 150% level | 100.268 | 1.241 |
| Precision |  |  |
| Repeatability (12 µg/mL) | 3643443.167 ± 4354.112 m.A.U. | 0.119 |
| Intermediate precision |  |  |
| * Intra-day |  |  |
| 6 µg/mL | 1880619 ± 1216.598 m.A.U. | 0.064 |
| 12 µg/mL | 3687662.667 ± 32458.115 m.A.U. | 0.88 |
| 18 µg/mL | 5872113.333 ± 22782.816 m.A.U. | 0.387 |
| * Inter-day |  |  |
| 6 µg/mL | 1850762.667 ± 13350.252 m.A.U. | 0.721 |
| 12 µg/mL | 3639347.333 ± 37043.657 m.A.U. | 1.017 |
| 18 µg/mL | 5845683.333 ± 9105.994 m.A.U. | 1.155 |
| LOD | 0.27 μg/mL |  |
| LOQ | 0.819 μg/mL |  |
| Robustness |  |  |
| * Flow rate |  |  |
| 0.8 mL/min | 4657913 ± 41988.913 m.A.U. | 0.901 |
| 1 mL/min | 3655028 ± 19590.404 m.A.U. | 0.535 |
| 1.2 mL/min | 3157162.333 ± 11512.149 m.A.U. | 0.364 |
| * Mobile phase composition (Methanol: Water) |  |  |
| 78:22 v/v | 3775809 ± 13947.62 m.A.U. | 0.369 |
| 80:20 v/v | 3642568 ± 32103.463 m.A.U. | 0.881 |
| 82:18 v/v | 3785191.667±22562.0006 m.A.U. | 0.596 |
| * Run time |  |  |
| 8 min | 3746709.667 ± 55753.844 m.A.U. | 1.488 |
| 10 min | 3644321.667 ± 5695.461 m.A.U. | 0.156 |
| 12 min | 3716112 ± 54328.062 m.A.U. | 1.461 |
| • Wavelength |  |  |
| 340 nm | 3711673.667 ± 43144.199 m.A.U. | 1.162 |
| 342 nm | 3688361.33 ± 66729.35 m.A.U. | 1.809 |
| 344 nm | 3856646 ± 17489.522 m.A.U. | 0.453 |
| System suitability study |  |  |
| Area | 3643443.167 ± 4354.112 m.A.U. | 0.119 |
| Retention time (Rt) | 6.406 ± 0.041 min | 0.646 |
| Number of theoretical plates | 3541.5 ± 31.17 | 0.88 |
| Peak purity | 0.99 ± 0.007 | 0.775 |
| Tailing factor (Asymmetry) | 0.868 ± 0.007 | 0.838 |
| Capacity factor (k1) | 1.135 ± 0.002 | 0.193 |