Table S1. Data for orthogonal experimental design of benziothiazolinone

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Array factor | A  (Solvent) | B  (Extract method) | C  (Volume, mL) | D  (C18) | Recovery a, b (%) |
| 1 | 1 (methanol) | 1 (vortex 1min and ultrasound 5 min) | 1 (10) | 1 (50 mg) | 54.14 |
| 2 | 1 (methanol) | 2 (vortex 1min and ultrasound 10 min) | 2 (20) | 2 (100 mg) | 65.83 |
| 3 | 1 (methanol) | 3 (vortex 1min and ultrasound 15 min) | 3 (30) | 3 (150 mg) | 43.30 |
| 4 | 2 (acetonitrile) | 1 vortex 1min and ultrasound 5 min) | 2 (20) | 3 (150 mg) | 78.43 |
| 5 | 2 (acetonitrile) | 2 (vortex 1min and ultrasound 10 min) | 3 (30) | 1 (50 mg) | 84.43 |
| 6 | 2 (acetonitrile) | 3 (vortex 1min and ultrasound 15 min) | 1 (10) | 2 (100 mg) | 69.09 |
| 7 | 3 (ethyl acetate) | 1 (vortex 1min and ultrasound 5 min) | 3 (30) | 2 (100 mg) | 62.35 |
| 8 | 3 (ethyl acetate) | 2 (vortex 1min and ultrasound 10 min) | 1 (10) | 3 (150 mg) | 83.68 |
| 9 | 3 (ethyl acetate) | 3 (vortex 1min and ultrasound 15 min) | 2 (20) | 1 (50 mg) | 78.81 |
| Average 1 (%) | 54.42 | 64.97 | 68.97 | 72.46 |  |
| Average 2 (%) | 77.32 | 77.98 | 74.36 | 65.76 |  |
| Average3 (%) | 74.95 | 63.73 | 63.36 | 68.47 |  |
| Range (%) | 22.89 | 14.25 | 11.00 | 6.70 |  |

Table S2. Orthogonal experimental analysis of variance (*α* = 0.1)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Factor | Sum of square of deviations | Degree of freedom | *F* ratio | *F* critical value | Significance |
| A | 950.93 | 2.00 | 3.185 | 3.11 | \* |
| B | 373.68 | 2.00 | 0.949 | 3.11 |  |
| C | 181.41 | 2.00 | 0.461 | 3.11 |  |
| D | 68.22 | 2.00 | 0.173 | 3.11 |  |
| Error | 1574.24 | 8.00 |  |  |  |