

Supplementary Materials

Table S1. Contents of hydrophilic components and moisture in Danshen during drying at 60 °C ($n = 3$).

| Analyte (mg/g) | Drying time (min) | | | | | | |
|----------------------|-------------------|-------------|-------------|-------------|-------------|------------|------------|
| | 0 | 60 | 120 | 180 | 240 | 300 | 360 |
| Moisture (%) | 72.48 ±0.84 | 56.68 ±0.80 | 36.77 ±2.47 | 16.83 ±0.81 | 10.66 ±0.73 | 9.04 ±0.47 | 7.77 ±0.57 |
| Danshensu | 0.06 ±0.00 | 0.09 ±0.00 | 0.08 ±0.00 | 0.10 ±0.00 | 0.09 ±0.00 | 0.08 ±0.00 | 0.09 ±0.00 |
| Protocatechuic acid | ND | ND | ND | ND | ND | ND | ND |
| Protocatechualdehyde | ND | ND | ND | ND | ND | ND | 0.01 ±0.00 |
| Caffeic acid | ND | ND | 0.01 ±0.00 | 0.04 ±0.00 | 0.06 ±0.01 | 0.03 ±0.01 | 0.05 ±0.00 |
| Rosmarinic acid | ND | ND | ND | 0.06 ±0.00 | 0.08 ±0.00 | ND | ND |
| Lithospermic acid | ND | 0.05 ±0.00 | 0.05 ±0.00 | 0.10 ±0.012 | 0.17 ±0.01 | 0.10 ±0.01 | 0.12 ±0.00 |
| Salvianolic acid B | 0.16 ±0.01 | 0.48 ±0.01 | 0.35 ±0.00 | 2.34 ±0.04 | 2.44 ±0.07 | 1.29 ±0.03 | 1.04 ±0.02 |
| Salvianolic acid A | ND | ND | ND | ND | 0.01 ±0.00 | 0.01 ±0.00 | 0.01 ±0.00 |
| Salvianolic acid C | 0.10 ±0.00 | 0.12 ±0.00 | 0.13 ±0.00 | 0.34 ±0.00 | 0.38 ±0.00 | 0.29 ±0.00 | 0.38 ±0.00 |

ND, not detected.

Table S2. Contents of hydrophilic components and moisture in Danshen during drying at 80 °C ($n = 3$).

| Analyte (mg/g) | Drying time (min) | | | | | | | |
|----------------------|-------------------|-------------|-------------|-------------|------------|------------|------------|------------|
| | 0 | 30 | 60 | 90 | 120 | 150 | 180 | 210 |
| Moisture (%) | 72.48 ±0.84 | 59.56 ±0.50 | 39.45 ±0.17 | 13.75 ±3.28 | 5.66 ±0.86 | 2.88 ±0.99 | 2.65 ±0.17 | 1.02 ±0.57 |
| Danshensu | 0.06 ±0.00 | 0.15 ±0.01 | 0.10 ±0.02 | 0.07 ±0.00 | 0.09 ±0.00 | 0.10 ±0.01 | 0.11 ±0.01 | 0.10 ±0.00 |
| Protocatechuic acid | ND | ND | ND | ND | ND | ND | 0.01 ±0.00 | 0.01 ±0.00 |
| Protocatechualdehyde | ND | ND | ND | ND | ND | 0.01 ±0.00 | 0.01 ±0.00 | ND |
| Caffeic acid | ND | 0.03 ±0.00 | 0.01 ±0.00 | 0.02 ±0.00 | 0.05 ±0.01 | 0.07 ±0.00 | 0.09 ±0.00 | 0.07 ±0.00 |
| Rosmarinic acid | ND | ND | ND | ND | ND | ND | ND | ND |
| Lithospermic acid | ND | 0.13 ±0.01 | 0.03 ±0.00 | 0.21 ±0.00 | 0.18 ±0.00 | 0.20 ±0.00 | 0.22 ±0.00 | 0.21 ±0.00 |
| Salvianolic acid B | 0.16 ±0.01 | 0.85 ±0.00 | 0.32 ±0.00 | 3.32 ±0.01 | 3.73 ±0.05 | 3.87 ±0.05 | 3.51 ±0.01 | 2.19 ±0.02 |
| Salvianolic acid A | ND | ND | ND | 0.02 ±0.00 | 0.02 ±0.00 | 0.03 ±0.00 | 0.03 ±0.00 | 0.03 ±0.00 |
| Salvianolic acid C | 0.10 ±0.00 | 0.30 ±0.00 | 0.31 ±0.00 | 0.39 ±0.01 | 0.31 ±0.00 | 0.41 ±0.00 | 0.39 ±0.00 | 0.38 ±0.00 |

ND, not detected.

Table S3. Contents of hydrophilic components and moisture in Danshen during drying at 100 °C ($n = 3$).

| Analyte (mg/g) | Drying time (min) | | | | | | |
|----------------------|-------------------|--------------|--------------|--------------|--------------|-------------|-------------|
| | 0 | 20 | 40 | 60 | 80 | 100 | 120 |
| Moisture (%) | 72.48 ± 0.84 | 58.27 ± 0.10 | 46.65 ± 1.30 | 10.61 ± 0.88 | 10.46 ± 0.64 | 5.37 ± 0.26 | 3.21 ± 0.12 |
| Danshensu | 0.06 ± 0.00 | 0.17 ± 0.00 | 0.19 ± 0.00 | 0.09 ± 0.00 | 0.11 ± 0.01 | 0.14 ± 0.00 | 0.14 ± 0.00 |
| Protocatechuic acid | ND | ND | ND | ND | ND | 0.02 ± 0.00 | ND |
| Protocatechualdehyde | ND | ND | ND | 0.01 ± 0.00 | 0.01 ± 0.00 | ND | ND |
| Caffeic acid | ND | ND | ND | ND | ND | ND | ND |
| Rosmarinic acid | ND | ND | ND | ND | ND | ND | ND |
| Lithospermic acid | ND | ND | ND | 0.09 ± 0.00 | 0.20 ± 0.00 | 0.29 ± 0.00 | 0.20 ± 0.01 |
| Salvianolic acid B | 0.16 ± 0.01 | 0.26 ± 0.00 | 0.27 ± 0.00 | 0.59 ± 0.02 | 1.62 ± 0.02 | 5.34 ± 0.00 | 2.73 ± 0.02 |
| Salvianolic acid A | ND | ND | ND | ND | ND | 0.01 ± 0.00 | ND |
| Salvianolic acid C | 0.10 ± 0.00 | 0.28 ± 0.00 | 0.28 ± 0.03 | 0.28 ± 0.04 | 0.34 ± 0.00 | 0.33 ± 0.00 | 0.31 ± 0.00 |

ND, not detected.

Table S4. Contents of hydrophilic components and moisture in Danshen during drying at 110 °C ($n = 3$).

| Analyte (mg/g) | Drying time (min) | | | | | | | | | | |
|----------------------|-------------------|--------------|--------------|--------------|--------------|--------------|-------------|--------------|--------------|--------------|--------------|
| | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
| Moisture (%) | 72.48 ± 0.84 | 61.37 ± 0.83 | 47.08 ± 0.51 | 32.79 ± 4.00 | 26.42 ± 2.26 | 22.23 ± 3.09 | 8.82 ± 1.65 | 6.72 ± 1.16 | 4.23 ± 0.63 | 4.01 ± 0.17 | 0.66 ± 0.05 |
| Danshensu | 0.06 ± 0.00 | 0.06 ± 0.00 | 0.06 ± 0.00 | 0.13 ± 0.00 | 0.12 ± 0.00 | 0.10 ± 0.00 | 0.10 ± 0.00 | 0.11 ± 0.00 | 0.12 ± 0.00 | 0.15 ± 0.00 | 0.22 ± 0.00 |
| Protocatechuic acid | ND | ND | ND | ND | ND | ND | 0.01 ± 0.00 | 0.03 ± 0.00 | 0.03 ± 0.00 | 0.05 ± 0.00 | 0.07 ± 0.00 |
| Protocatechualdehyde | ND | ND | ND | ND | ND | ND | ND | 0.01 ± 0.00 | 0.01 ± 0.00 | 0.01 ± 0.00 | 0.01 ± 0.00 |
| Caffeic acid | ND | ND | ND | 0.02 ± 0.00 | 0.04 ± 0.00 | 0.04 ± 0.01 | 0.04 ± 0.00 | 0.04 ± 0.00 | 0.05 ± 0.00 | 0.05 ± 0.00 | 0.05 ± 0.00 |
| Rosmarinic acid | ND | ND | ND | ND | ND | ND | ND | 0.01 ± 0.00 | 0.06 ± 0.00 | 0.06 ± 0.00 | 0.07 ± 0.00 |
| Lithospermic acid | ND | ND | ND | 0.23 ± 0.00 | 0.35 ± 0.00 | 0.37 ± 0.01 | 0.39 ± 0.00 | 0.53 ± 0.00 | 0.59 ± 0.00 | 0.62 ± 0.00 | 0.71 ± 0.00 |
| Salvianolic acid B | 0.16 ± 0.01 | 0.16 ± 0.00 | 0.98 ± 0.00 | 2.71 ± 0.05 | 6.53 ± 0.12 | 6.87 ± 0.04 | 6.93 ± 0.11 | 11.29 ± 0.04 | 13.73 ± 0.06 | 14.25 ± 0.16 | 13.24 ± 0.19 |
| Salvianolic acid A | ND | ND | ND | 0.02 ± 0.00 | 0.03 ± 0.00 | 0.02 ± 0.00 | 0.03 ± 0.00 | 0.03 ± 0.00 | 0.04 ± 0.00 | 0.03 ± 0.00 | 0.06 ± 0.00 |
| Salvianolic acid C | 0.10 ± 0.00 | 0.28 ± 0.01 | 0.28 ± 0.02 | 0.42 ± 0.00 | 0.42 ± 0.00 | 0.40 ± 0.00 | 0.36 ± 0.00 | 0.36 ± 0.00 | 0.37 ± 0.00 | 0.34 ± 0.00 | 0.31 ± 0.00 |

ND, not detected.

Table S5. Contents of hydrophilic components and moisture in Danshen during drying at 120 °C ($n = 3$).

| Analyte (mg/g) | Drying time (min) | | | | | | | | | | |
|----------------------|-------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
| Moisture (%) | 72.48 ± 0.84 | 58.66 ± 1.73 | 39.89 ± 3.71 | 17.27 ± 1.81 | 13.49 ± 4.56 | 12.22 ± 2.72 | 4.68 ± 0.72 | 2.37 ± 0.36 | 0 | 0 | 0 |
| Danshensu | 0.06 ± 0.00 | 0.08 ± 0.00 | 0.08 ± 0.00 | 0.09 ± 0.00 | 0.10 ± 0.00 | 0.11 ± 0.00 | 0.12 ± 0.00 | 0.22 ± 0.00 | 0.29 ± 0.00 | 0.41 ± 0.00 | 0.47 ± 0.00 |
| Protocatechuic acid | ND | ND | ND | 0.03 ± 0.00 | 0.03 ± 0.00 | 0.03 ± 0.00 | 0.03 ± 0.00 | 0.09 ± 0.00 | 0.09 ± 0.00 | 0.12 ± 0.00 | 0.11 ± 0.00 |
| Protocatechualdehyde | ND | ND | ND | 0.01 ± 0.00 | 0.01 ± 0.00 | 0.01 ± 0.00 | 0.01 ± 0.00 | 0.01 ± 0.00 | 0.01 ± 0.00 | 0.01 ± 0.00 | 0.015 ± 0.00 |
| Caffeic acid | ND | ND | ND | 0.09 ± 0.00 | 0.08 ± 0.00 | 0.09 ± 0.00 | 0.10 ± 0.00 | 0.09 ± 0.00 | 0.07 ± 0.00 | 0.08 ± 0.00 | 0.09 ± 0.00 |
| Rosmarinic acid | ND | ND | ND | ND | 0.02 ± 0.00 | 0.02 ± 0.00 | 0.66 ± 0.01 | 0.34 ± 0.01 | 0.35 ± 0.00 | 0.34 ± 0.00 | 0.25 ± 0.00 |
| Lithospermic acid | ND | 0.08 ± 0.00 | 0.09 ± 0.00 | 0.53 ± 0.00 | 0.51 ± 0.01 | 0.49 ± 0.00 | 0.66 ± 0.01 | 0.87 ± 0.00 | 0.74 ± 0.00 | 0.86 ± 0.00 | 0.82 ± 0.01 |
| Salvianolic acid B | 0.16 ± 0.01 | 1.26 ± 0.00 | 1.46 ± 0.02 | 10.67 ± 0.11 | 10.15 ± 0.12 | 10.11 ± 0.08 | 14.25 ± 0.08 | 21.76 ± 0.07 | 21.74 ± 0.07 | 21.37 ± 0.10 | 19.72 ± 0.10 |
| Salvianolic acid A | ND | ND | ND | 0.03 ± 0.00 | 0.08 ± 0.00 | 0.09 ± 0.01 | 0.09 ± 0.00 | 0.10 ± 0.01 | 0.09 ± 0.00 | 0.11 ± 0.00 | 0.10 ± 0.00 |
| Salvianolic acid C | 0.10 ± 0.00 | 0.10 ± 0.00 | 0.10 ± 0.00 | 0.19 ± 0.00 | 0.25 ± 0.00 | 0.25 ± 0.00 | 0.24 ± 0.00 | 0.22 ± 0.00 | 0.21 ± 0.00 | 0.17 ± 0.00 | 0.25 ± 0.00 |

ND, not detected.

Table S6. Contents of hydrophilic components and moisture in Danshen during drying at 130 °C (n = 3).

| Analyte (mg/g) | Drying time (min) | | | | | | | | | | |
|----------------------|-------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
| Moisture (%) | 72.48 ± 0.84 | 54.73 ± 1.84 | 28.29 ± 2.71 | 12.39 ± 2.12 | 4.12 ± 0.51 | 4.08 ± 0.69 | 0.78 ± 0.05 | 0 | 0 | 0 | 0 |
| Danshensu | 0.06 ± 0.00 | 0.20 ± 0.00 | 0.11 ± 0.00 | 0.19 ± 0.00 | 0.31 ± 0.00 | 0.32 ± 0.00 | 0.37 ± 0.00 | 0.62 ± 0.02 | 0.90 ± 0.00 | 1.14 ± 0.00 | 1.11 ± 0.03 |
| Protocatechuic acid | ND | ND | ND | 0.07 ± 0.00 | 0.08 ± 0.00 | 0.09 ± 0.00 | 0.13 ± 0.01 | 0.13 ± 0.00 | 0.12 ± 0.00 | 0.12 ± 0.00 | 0.11 ± 0.00 |
| Protocatechualdehyde | ND | ND | ND | 0.01 ± 0.00 | 0.01 ± 0.00 | 0.01 ± 0.00 | 0.02 ± 0.00 | 0.02 ± 0.01 | 0.01 ± 0.00 | 0.02 ± 0.00 | 0.01 ± 0.00 |
| Caffeic acid | ND | ND | 0.04 ± 0.00 | 0.08 ± 0.00 | 0.05 ± 0.00 | 0.05 ± 0.00 | 0.07 ± 0.00 | 0.05 ± 0.01 | 0.04 ± 0.00 | 0.04 ± 0.01 | 0.04 ± 0.00 |
| Rosmarinic acid | ND | ND | 0.23 ± 0.00 | 0.33 ± 0.00 | 0.32 ± 0.00 | 0.38 ± 0.01 | 0.55 ± 0.00 | 0.70 ± 0.011 | 0.78 ± 0.00 | 0.81 ± 0.00 | 0.79 ± 0.00 |
| Lithospermic acid | ND | 0.05 ± 0.00 | 0.77 ± 0.00 | 0.95 ± 0.00 | 0.96 ± 0.00 | 0.94 ± 0.04 | 1.08 ± 0.00 | 1.04 ± 0.02 | 1.04 ± 0.026 | 1.23 ± 0.00 | 1.01 ± 0.01 |
| Salvianolic acid B | 0.16 ± 0.01 | 0.98 ± 0.01 | 21.65 ± 0.08 | 21.37 ± 0.24 | 21.11 ± 0.15 | 21.69 ± 0.23 | 27.89 ± 0.17 | 27.53 ± 0.42 | 34.89 ± 0.23 | 27.52 ± 0.16 | 25.32 ± 0.21 |
| Salvianolic acid A | ND | ND | 0.09 ± 0.00 | 0.14 ± 0.00 | 0.11 ± 0.00 | 0.12 ± 0.00 | 0.17 ± 0.00 | 0.21 ± 0.00 | 0.21 ± 0.00 | 0.22 ± 0.00 | 0.21 ± 0.00 |
| Salvianolic acid C | 0.10 ± 0.00 | 0.07 ± 0.00 | 0.30 ± 0.00 | 0.26 ± 0.01 | 0.19 ± 0.00 | 0.18 ± 0.01 | 0.17 ± 0.00 | 0.13 ± 0.00 | 0.12 ± 0.00 | 0.10 ± 0.00 | 0.10 ± 0.00 |

ND, not detected

Table S7. Contents of hydrophilic components and moisture in Danshen during drying at 140 °C (n = 3).

| Analyte (mg/g) | Drying time (min) | | | | | | |
|----------------------|-------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | 0 | 10 | 20 | 30 | 40 | 50 | 60 |
| Moisture (%) | 72.48 ± 0.84 | 49.52 ± 0.89 | 8.61 ± 1.88 | 0.96 ± 0.08 | 0 | 0 | 0 |
| Danshensu | 0.06 ± 0.00 | 0.14 ± 0.01 | 0.14 ± 0.02 | 0.39 ± 0.01 | 0.72 ± 0.01 | 1.90 ± 0.01 | 1.83 ± 0.09 |
| Protocatechuic acid | ND | MA | 0.03 ± 0.00 | 0.07 ± 0.00 | 0.08 ± 0.00 | 0.15 ± 0.00 | 0.12 ± 0.01 |
| Protocatechualdehyde | ND | MA | 0.01 ± 0.00 | 0.01 ± 0.00 | 0.01 ± 0.00 | 0.01 ± 0.00 | 0.02 ± 0.00 |
| Caffeic acid | ND | MA | 0.05 ± 0.00 | 0.06 ± 0.00 | 0.04 ± 0.00 | 0.03 ± 0.00 | 0.03 ± 0.01 |
| Rosmarinic acid | ND | MA | 0.49 ± 0.00 | 1.28 ± 0.01 | 1.53 ± 0.02 | 1.04 ± 0.04 | 1.12 ± 0.00 |
| Lithospermic acid | ND | 0.11 ± 0.00 | 0.45 ± 0.00 | 0.58 ± 0.00 | 0.56 ± 0.00 | 0.99 ± 0.03 | 1.10 ± 0.03 |
| Salvianolic acid B | 0.16 ± 0.01 | 0.87 ± 0.01 | 19.69 ± 0.11 | 28.38 ± 0.68 | 28.31 ± 0.99 | 30.81 ± 0.84 | 28.48 ± 0.81 |
| Salvianolic acid A | ND | 0.04 ± 0.00 | 0.10 ± 0.00 | 0.21 ± 0.00 | 0.23 ± 0.01 | 0.26 ± 0.00 | 0.27 ± 0.00 |
| Salvianolic acid C | 0.10 ± 0.00 | 0.14 ± 0.01 | 0.18 ± 0.00 | 0.14 ± 0.00 | 0.12 ± 0.00 | 0.10 ± 0.00 | 0.11 ± 0.00 |

ND, not detected.

Table S8. Contents of hydrophilic components and moisture in Danshen during drying at 150 °C (n = 3).

| Analyte (mg/g) | Drying time (min) | | | | |
|----------------------|-------------------|--------------|--------------|--------------|--------------|
| | 0 | 10 | 20 | 30 | 40 |
| Moisture (%) | 72.48 ± 0.84 | 45.70 ± 0.67 | 8.04 ± 2.38 | 0.59 ± 0.81 | 0 |
| Danshensu | 0.06 ± 0.00 | 0.14 ± 0.00 | 0.28 ± 0.00 | 1.56 ± 0.00 | 2.16 ± 0.02 |
| Protocatechuic acid | ND | ND | 0.11 ± 0.01 | 0.31 ± 0.00 | 0.32 ± 0.01 |
| Protocatechualdehyde | ND | ND | 0.01 ± 0.00 | 0.02 ± 0.00 | 0.01 ± 0.00 |
| Caffeic acid | ND | ND | 0.03 ± 0.00 | 0.02 ± 0.00 | 0.02 ± 0.00 |
| Rosmarinic acid | ND | ND | 0.51 ± 0.00 | 1.36 ± 0.01 | 1.22 ± 0.00 |
| Lithospermic acid | ND | 0.07 ± 0.00 | 0.85 ± 0.01 | 1.07 ± 0.00 | 0.94 ± 0.00 |
| Salvianolic acid B | 0.16 ± 0.01 | 0.36 ± 0.00 | 29.04 ± 0.15 | 31.45 ± 0.19 | 30.82 ± 0.14 |
| Salvianolic acid A | ND | ND | 0.14 ± 0.00 | 0.31 ± 0.00 | 0.29 ± 0.00 |
| Salvianolic acid C | 0.10 ± 0.00 | 0.22 ± 0.00 | 0.15 ± 0.00 | 0.11 ± 0.00 | 0.07 ± 0.00 |

ND, not detected.

Table S9. The regression equations of nonlinear quadratic polynomial model at 60–150 °C.

| Temperature (°C) | Drying curve | R ² |
|------------------|------------------------------------|----------------|
| 60 | $Y = 0.0006X^2 - 0.4160x + 75.246$ | 0.988 |
| 80 | $Y = 0.0023X^2 - 0.8480x + 76.983$ | 0.977 |
| 100 | $Y = 0.0049X^2 - 1.2128x + 76.860$ | 0.946 |
| 110 | $Y = 0.0077X^2 - 1.4863x + 73.404$ | 0.993 |
| 120 | $Y = 0.0165X^2 - 2.1637x + 74.492$ | 0.979 |
| 130 | $Y = 0.0261X^2 - 2.7843x + 74.823$ | 0.989 |
| 140 | $Y = 0.0383X^2 - 3.7030x + 75.041$ | 0.962 |
| 150 | $Y = 0.0483X^2 - 3.9831x + 75.535$ | 0.975 |

Table S10. Contents of salvianolic acids in Danshen during the drying process at 130 °C.

| Analytes | Drying time (min) | | | | | | |
|--------------------------------------|-------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | 0 | 20 | 40 | 60 | 80 | 100 | 120 |
| Moisture (%) | 65.14 ±0.57 | 61.19 ±0.24 | 55.34 ±0.64 | 47.17 ±0.66 | 24.03 ±0.38 | 11.11 ±0.39 | 4.79 ±0.06 |
| Danshensu ^a | ND | ND | ND | 0.09 ±0.00 | 0.29 ±0.00 | 0.58 ±0.00 | 0.49 ±0.01 |
| Protocatechuic acid ^a | ND | ND | ND | ND | ND | 0.09 ±0.00 | 0.09 ±0.01 |
| Protocatechualdehyde ^a | ND | ND | ND | 0.06 ±0.00 | 0.09 ±0.00 | 0.13 ±0.00 | 0.11 ±0.00 |
| Caffeic acid ^a | ND | ND | ND | 0.09 ±0.01 | 0.10 ±0.00 | 0.15 ±0.00 | 0.10 ±0.00 |
| Rosmarinic acid ^a | ND | ND | 0.24 ±0.02 | 0.40 ±0.00 | 0.58 ±0.00 | 0.73 ±0.01 | 0.52 ±0.02 |
| Lithospermic acid ^a | ND | ND | 0.28 ±0.01 | 0.48 ±0.01 | 0.64 ±0.02 | 0.82 ±0.00 | 0.61 ±0.01 |
| Salvianolic acid B ^a | 0.17 ±0.05 | 8.01 ±0.68 | 25.92 ±0.38 | 43.02 ±0.77 | 55.09 ±0.60 | 66.37 ±0.12 | 46.11 ±0.07 |
| Salvianolic acid A ^a | ND | ND | ND | ND | 0.10 ±0.01 | 0.29 ±0.01 | 0.33 ±0.02 |
| Salvianolic acid C ^a | ND | 1.27 ±0.02 | 0.76 ±0.01 | 0.68 ±0.02 | 0.49 ±0.01 | 0.62 ±0.01 | 0.40 ±0.01 |
| Total salvianolic acids ^a | 0.17 | 9.28 | 27.2 | 44.79 | 57.38 | 69.78 | 48.76 |
| Total phenolic acids ^a | 2.01 ±0.03 | 11.37 ±0.30 | 29.35 ±0.85 | 44.97 ±0.08 | 66.13 ±1.37 | 73.48 ±1.35 | 78.99 ±1.15 |

^a the unit: mg/g.**Table S11.** DPPH Radical scavenging ability of Danshen samples during the drying process at 130 °C.

| Samples ^a (mg/mL) | Radical scavenging ability (%) | | | | | | |
|---------------------------------|--------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | 0 min | 20 min | 40 min | 60 min | 80 min | 100 min | 120 min |
| 4.4 | 30.53 ±1.04 | 56.40 ±4.35 | 83.48 ±1.24 | 86.68 ±0.78 | 89.73 ±0.22 | 90.25 ±1.05 | 91.67 ±0.34 |
| 2.2 | 20.73 ±1.16 | 34.52 ±5.12 | 71.50 ±6.54 | 85.19 ±0.93 | 85.12 ±0.68 | 90.18 ±1.61 | 90.85 ±0.67 |
| 1.1 | 8.40 ±1.64 | 17.56 ±3.56 | 37.80 ±3.47 | 80.06 ±1.31 | 63.69 ±1.23 | 90.10 ±0.90 | 90.48 ±0.46 |
| 0.55 | 6.58 ±0.53 | 10.79 ±3.85 | 22.32 ±2.57 | 63.69 ±1.23 | 61.68 ±0.56 | 87.43 ±3.23 | 88.84 ±1.36 |
| 0.28 | 4.90 ±0.44 | 3.20 ±0.68 | 10.49 ±1.02 | 29.02 ±1.24 | 48.51 ±2.00 | 48.86 ±5.79 | 66.07 ±2.13 |
| 0.14 | 3.01 ±1.71 | 1.93 ±0.26 | 2.31 ±0.13 | 11.53 ±0.78 | 22.25 ±2.97 | 22.47 ±2.37 | 17.56 ±3.31 |
| ^a IC ₅₀ | 7.75 ±0.04 | 4.08 ±0.12 | 1.61 ±0.06 | 0.44 ±0.01 | 0.43 ±0.01 | 0.31 ±0.02 | 0.23 ±0.01 |

^a Samples were extracted from dried Danshen root powder by the 70% aqueous methanol and then diluted to the indicated concentration.

Table S12. Lipid peroxidation inhibition activity of Danshen samples during the drying process at 130 °C.

| Samples ^a (mg/mL) | Lipid peroxidation inhibition activity (%) | | | | | | |
|---------------------------------|--|--------------|--------------|--------------|--------------|--------------|--------------|
| | 0 min | 20 min | 40 min | 60 min | 80 min | 100 min | 120 min |
| 4.4 | 48.80 ± 1.43 | 63.26 ± 1.16 | 76.36 ± 1.21 | 64.90 ± 3.31 | 76.77 ± 2.44 | 84.09 ± 4.61 | 75.51 ± 2.80 |
| 2.2 | 32.27 ± 1.50 | 55.65 ± 0.32 | 51.72 ± 3.05 | 45.36 ± 2.98 | 48.74 ± 0.44 | 56.06 ± 3.03 | 55.44 ± 2.33 |
| 1.1 | 25.11 ± 2.31 | 27.44 ± 2.63 | 31.31 ± 1.53 | 24.50 ± 3.97 | 23.48 ± 0.76 | 23.86 ± 1.14 | 39.93 ± 1.29 |
| 0.55 | 22.77 ± 1.24 | 17.05 ± 1.47 | 18.99 ± 1.53 | 15.23 ± 0.66 | 20.96 ± 1.16 | 20.45 ± 3.03 | 28.49 ± 3.68 |
| 0.28 | 21.41 ± 1.06 | 8.98 ± 2.87 | 13.54 ± 1.95 | 8.61 ± 0.66 | 10.86 ± 1.91 | 18.43 ± 0.44 | 10.60 ± 1.16 |
| 0.14 | 2.63 ± 1.08 | 3.37 ± 0.84 | 7.27 ± 0.61 | 6.62 ± 1.15 | 6.31 ± 1.58 | 17.42 ± 0.76 | 5.82 ± 1.96 |
| ^a IC ₅₀ | 4.85 ± 0.14 | 3.01 ± 0.05 | 2.60 ± 0.02 | 3.20 ± 0.12 | 2.69 ± 0.08 | 2.28 ± 0.08 | 2.24 ± 0.05 |

^a Samples were extracted from dried Danshen root powder by the 70% aqueous methanol and then diluted to the indicated concentration.

Table S13. ·OH Radical scavenging ability of Danshen samples during the drying process at 130 °C.

| Samples ^a (mg/mL) | Radical scavenging ability (%) | | | | | | |
|---------------------------------|--------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | 0 min | 20 min | 40 min | 60 min | 80 min | 100 min | 120 min |
| 4.4 | 62.12 ± 0.71 | 68.33 ± 1.01 | 80.24 ± 1.01 | 73.33 ± 1.35 | 85.00 ± 2.61 | 85.95 ± 5.05 | 82.38 ± 0.67 |
| 2.2 | 37.63 ± 1.07 | 55.22 ± 0.34 | 58.33 ± 1.01 | 65.48 ± 1.01 | 66.05 ± 3.35 | 70.95 ± 0.67 | 72.14 ± 1.68 |
| 1.1 | 27.27 ± 3.57 | 42.86 ± 6.06 | 30.95 ± 2.69 | 41.19 ± 3.70 | 40.00 ± 0.00 | 51.67 ± 1.68 | 54.52 ± 0.34 |
| 0.55 | 14.39 ± 1.79 | 37.62 ± 4.04 | 25.71 ± 2.02 | 31.19 ± 1.01 | 33.95 ± 5.58 | 38.81 ± 2.36 | 37.86 ± 2.36 |
| 0.28 | 12.37 ± 0.36 | 26.90 ± 3.70 | 16.43 ± 1.01 | 23.10 ± 3.03 | 15.00 ± 1.12 | 27.38 ± 1.01 | 27.38 ± 0.34 |
| 0.14 | 9.85 ± 0.36 | 23.57 ± 1.01 | 10.48 ± 0.67 | 19.29 ± 0.34 | 9.74 ± 3.35 | 25.00 ± 1.01 | 23.10 ± 3.70 |
| ^a IC ₅₀ | 2.57 ± 0.03 | 2.36 ± 0.02 | 2.27 ± 0.09 | 1.49 ± 0.08 | 1.13 ± 0.02 | 0.74 ± 0.06 | 0.80 ± 0.05 |

^a Samples were extracted from dried Danshen root powder by the 70% aqueous methanol and then diluted to the indicated concentration.

Table S14. O₂⁻ Radical scavenging ability of Danshen samples during the drying process at 130 °C.

| Samples ^a (mg/mL) | Radical scavenging ability (%) | | | | | | |
|---------------------------------|--------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | 0 min | 20 min | 40 min | 60 min | 80 min | 100 min | 120 min |
| 4.4 | 14.16 ± 1.61 | 22.49 ± 1.74 | 45.40 ± 0.29 | 71.57 ± 0.58 | 70.96 ± 0.29 | 70.96 ± 0.87 | 68.71 ± 1.16 |
| 2.2 | 6.51 ± 0.16 | 16.16 ± 0.58 | 32.92 ± 0.29 | 66.16 ± 2.17 | 69.33 ± 0.58 | 69.33 ± 1.16 | 66.97 ± 2.46 |
| 1.1 | 4.22 ± 0.16 | 10.22 ± 0.58 | 15.75 ± 3.47 | 47.03 ± 4.05 | 50.20 ± 0.14 | 66.97 ± 1.30 | 62.88 ± 3.90 |
| 0.55 | 3.88 ± 0.97 | 10.02 ± 0.58 | 13.19 ± 6.22 | 28.63 ± 0.58 | 43.05 ± 1.59 | 39.16 ± 1.01 | 39.16 ± 1.01 |
| 0.28 | 2.85 ± 0.16 | 7.36 ± 0.58 | 7.16 ± 2.31 | 11.76 ± 0.14 | 17.69 ± 0.72 | 17.79 ± 1.74 | 8.79 ± 3.47 |
| 0.14 | 0.68 ± 0.97 | 5.52 ± 2.02 | 5.32 ± 0.87 | 4.70 ± 2.31 | 7.26 ± 2.46 | 7.57 ± 2.89 | 5.52 ± 2.02 |
| ^a IC ₅₀ | 17.25 ± 1.29 | 14.12 ± 0.08 | 5.16 ± 0.25 | 1.35 ± 0.01 | 1.10 ± 0.04 | 0.80 ± 0.02 | 0.86 ± 0.04 |

^a Samples were extracted from dried Danshen root powder by the 70% aqueous methanol and then diluted to the indicated concentration.