Liquid CO₂ All samples vs Conventional Wash
Average of All 40 samples for liquid CO₂ taken, average of all 5 samples for conventional wash

Figure S1: Box-plot of average washing efficiencies of all compounds for all samples

| t Test | Liquid CO2-Conventional Wash  |
|--------|------------------------------|
|        | Assuming unequal variances   |
| Difference | 0.277433  t Ratio  | 3.44543 |
| Std Err Dif  | 0.080522   DF   | 8.226654 |
| Upper CL Dif | 0.462231  Prob > | 0.0084* |
| Lower CL Dif | 0.092636  Prob > | 0.0042* |
| Confidence  | 0.95       Prob < t | 0.9958  |

Figure S2: t-Test analysis (All samples)
Data Analysis

Conventional Wash

|                      | W      | Prob<W |
|----------------------|--------|--------|
| Shapiro-Wilk         | 0.9042853 | 0.2779 |
| Anderson-Darling     | 0.3968383 | 0.3076 |

Liquid CO₂

|                      | W      | Prob<W |
|----------------------|--------|--------|
| Shapiro-Wilk         | 0.9235319 | 0.4223 |
| Anderson-Darling     | 0.3036233 | 0.5416 |

Figure S3: Normality test when all samples are considered (Left: Conventional washing, Right: liquid CO₂ washing)

Equal Number of Samples

5 samples randomly chosen from set of 40 samples for liquid CO₂, data for conventional wash is kept same

Figure S4: Box-Plot of average washing efficiencies of all compounds (when equal number of samples are considered)
Data Analysis

Conventional Wash

Goodness-of-Fit Test

|              | W   | Prob<W |
|--------------|-----|--------|
| Shapiro-Wilk | 0.9042853 | 0.2779 |
| Anderson-Darling | 0.3968383 | 0.3144 |

Liquid CO₂

Goodness-of-Fit Test

|              | W   | Prob<W |
|--------------|-----|--------|
| Shapiro-Wilk | 0.9284053 | 0.4663 |
| Anderson-Darling | 0.2811541 | 0.5988 |

Figure S5: Normality test for equal number of samples (Left: Conventional washing, Right: liquid CO₂ washing)

T-test

|                      |       |       |       |
|----------------------|-------|-------|-------|
| Difference            | 0.276344 | t Ratio | 3.430912 |
| Std Err Dif           | 0.080545 | DF | 8.236057 |
| Upper CL Dif          | 0.461160 | Prob > | 0.0086* |
| Lower CL Dif          | 0.091529 | Prob > t | 0.0043* |
| Confidence            | 0.95  | Prob < t | 0.9957 |

Figure S6: t-Test analysis (Equal number of samples)