

Variability of *MegaQuant*[™] L-Malic Acid Assay Within and Between Days

Assays performed four times on each of four days

Sample	L-Malic Acid (g/L)				Between Days	Overall
	Mean ± SD (Between replicates CV %)				Mean ± SD (CV %)	Mean ± SD (CV %)
	Day 1	Day 2	Day 3	Day 4		
White wine 1. Rives Blanque Diln: 1:4	0.503* ± 0.006 (1.3%)	0.491 ± 0.008 (1.6%)	0.487 ± 0.006 (1.3%)	0.493 ± 0.003 (0.80%)	0.494 ± 0.006 (1.3%)	0.494 ± 0.008 (1.7%)
White wine 2. Macon Village Diln: 1:2	0.336 ± 0.012 (3.5%)	0.330 ± 0.006 (1.9%)	0.330 ± 0.006 (1.9%)	0.332 ± 0.004 (1.2%)	0.332 ± 0.008 (2.3%)	0.332 ± 0.007 (2.2%)
Red wine 2. T 164 RVMER-8 Diln: 1:2	0.460 ± 0.008 (1.7%)	0.456 ± 0.006 (1.4%)	0.460 ± 0.010 (2.2%)	0.460 ± 0.010 (2.2%)	0.459 ± 0.009 (1.9%)	0.459 ± 0.008 (1.8%)
Red wine 10. T166 RVCSA Diln: 1:2	0.554 ± 0.004 (0.82%)	0.556 ± 0.007 (1.4%)	0.562 ± 0.014 (2.4%)	0.558 ± 0.011 (2.0%)	0.558 ± 0.010 (1.8%)	0.558 ± 0.009 (1.7%)
L-Malic Acid standard 0.375mg/ml	0.378 ± 0.006 (mg/mL) (1.7%)	0.380 ± 0.007 (mg/mL) (1.9%)	0.384 ± 0.007 (mg/mL) (1.9%)	0.382 ± 0.004 (mg/mL) (1.2%)	0.381 ± 0.006 (mg/mL) (1.7%)	0.381 ± 0.006 (mg/mL) (1.6%)

There were some significant differences in L-Malic acid values between days:-

White wine 1. **Rives Blanque** Day 1* results were significantly greater than for other days (p < 0.05)

Values for wine samples are as g/L. The L-malic acid standard values (in red) are expressed as mg/mL.