

	Set 1	Set 2	Set 3	Set 4
sigm/Δct/4-par	65.5 (36.9)	106.4 (7.0)	108.3 (16.6)	84.9 (7.6)
sigm/Δct/5-par	73.5 (21.9)	77.2 (4.5)	89.3 (4.6)	75.9 (8.3)
sigm/F0/4-par	46.6 (35.8)	79.7 (15.2)	117.3 (79.1)	68.8 (21.1)
sigm/F0/5-par	70.4 (42.4)	86.1 (17.8)	87.1 (33.6)	72.6 (48.6)
exp/Δct/4-par	85.7 (21.8)	104.2 (11.2)	318.8 (31.7)	339.5 (60.7)
exp/Δct/5-par	82.6 (21.2)	101.3 (10.2)	319.74 (29.9)	355.4 (61.3)
exp/F0	198.0 (93.1)	238.9 (92.6)	79.2 (134.0)	N.V.
w-o-l/Δct/4-par	59.4 (18.2)	83.9 (5.4)	105.7 (19.5)	74.1 (20.7)
w-o-l/Δct/5-par	57.5 (18.3)	81.9 (5.0)	103.9 (14.9)	73.9 (21.8)
w-o-l/F0	53.5 (25.9)	76.3 (14.3)	310.2 (118.2)	295.8 (175.6)
calib/Δct/4-par	126.0 (21.6)	100.6 (5.8)	100.6 (11.5)	99.9 (7.7)
calib/Δct/5-par	128.6 (20.8)	97.9 (5.1)	99.3 (5.9)	99.3 (8.1)

Table 1. Summary for accuracy and precision of dilution ratio quantitation obtained from four independent dilution datasets.

Seven commonly used quantification methods in conjunction with threshold cycles estimated from four- and five-parameter sigmoidal models were applied for the analysis. Four different datasets differing in the number of replicates, chemistry and platform were analyzed in respect to accuracy (average percentage of calculated ratios from real ratios) and precision (average c.v.; numbers in brackets). Threshold cycles estimated from the second derivatives maximum of four- and five-parameter sigmoidal models (4-par, 5-par) were used in combination with the following methods: sigmoidal model with Δ ct method (sigm/ Δ ct), sigmoidal model with initial fluorescence (sigm/F0), exponential model with Δ ct method (exp/ Δ ct), exponential model with initial fluorescence (exp/F0), window-of-linearity method with Δ ct method (w-o-l/ Δ ct), window-of-linearity method with initial fluorescence (w-o-l/F0) and calibration curve with Δ ct method (calib/ Δ ct). Numbers in bold are combinations in which the five-parameter model performs better. N.V. : no realistic estimation values due to high imprecision.