

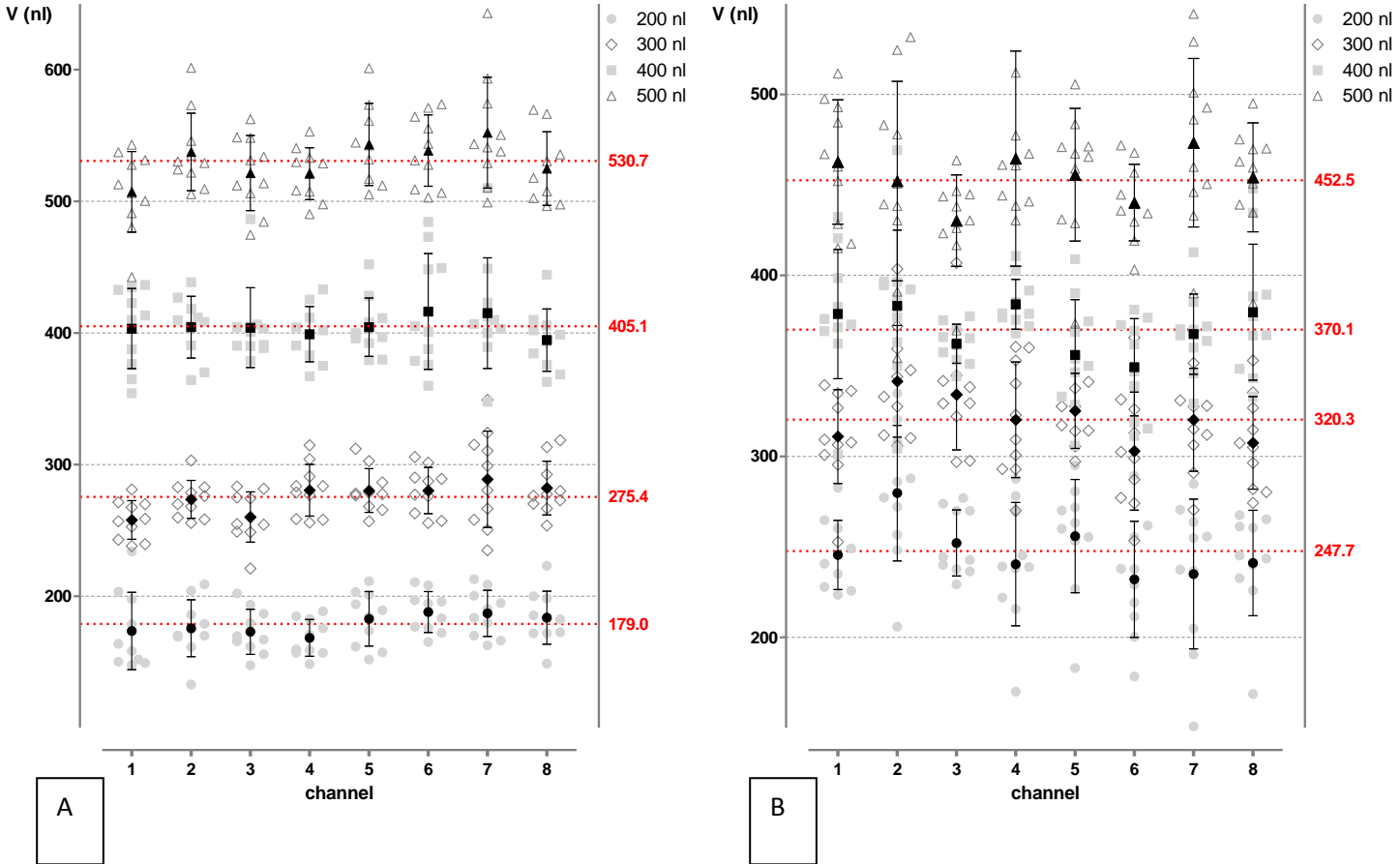
Supplementary Materials and Methods.

Preparation of 0.3 μ l pipetting mode. Dispensing of 0.3 μ l aliquots by Pipetman Concept 8x10 multichannel pipette was accomplished by a method created in the Concept Utility Software V1.13. The sequence downloaded to the pipette was as follows:

```
Program Mode:  
WAIT(start not pushed; aspirate)  
ASPIRATE(vol=0.60; speed=0.50; name=Aspirate)  
WAIT(start not pushed; discard)  
DISPENSE(vol=0.30!; speed=0.50; name=discard)  
WAIT(start not pushed; dispense)  
DISPENSE(vol=0.30!; speed=0.50; name=dispense)  
PURGE(auto)
```

Sequences for 0.2, 0.4 and 0.5 μ l pipetting modes were prepared accordingly by changing of corresponding aspirate and dispense volumes.

Supplementary figure 1



Results of the multichannel pipette Pipetman Concept 8x10 calibration with a PBS buffer (A) and a 25 % (w/w) PEG 8000 solution (B). Individual replicates of calibration volume readings are grouped by pipette channels. Filled circles, empty diamonds, filled squares and empty triangles correspond to 200, 300, 400 and 500 nl pre-set volumes, respectively. Black symbols are the channel mean values, black vertical lines are the SDs. Gray horizontal dashed lines and black numerical values are the pre-set volumes, red horizontal dashed lines and red numerical values are the mean values of the whole set of eighty independent measurements for each condition tested.

Supplementary Table 1

Selected models of handheld motorized pipettes with limiting pipetting volume of 10 μ l. Manufacturers' quoted maximal values of systematic and random errors are shown for 1 μ l volume pipetting; errors for lower nominal volumes were not available for each manufacturer. Pipetman Concept pipettes were used in the present work.

Model line	Manufacturer	Range (μ l)	Step size (μ l)	Single channel		8/12 channels		Web link
				systematic error (μ l)	random error (μ l)	systematic error (μ l)	random error (μ l)	
eLine electronic	Biohit	0.2-10	0.05	\pm 0.025	0.015	\pm 0.04	0.03	http://www.biohit.com/liquid-handling/pipettes-electronic/products/9/eline-electronic-pipette
Pipetman Concept	Gilson	0-10*	0.01	\pm 0.025	0.012	\pm 0.04	0.02	http://www.gilson.com/en/Pipette/Products/48.219/Details.aspx?d=248
Research Pro	Eppendorf	0.5-10	0.01	\pm 0.025	0.018	\pm 0.05	0.03	http://www.eppendorf.de/int/index.php?sitemap=2.3&pb=1429cae507852c92&action=products&contentid=1&catalognode=9649&productpage=3
Transferpette electronic	Brand	0.5-10	0.01	\pm 0.05	0.02	\pm 0.08	0.04	http://www.brand.de/en/products/liquid-handling/microliter-pipettes/
E4 XLS	Rainin	0-10	0.01	\pm 0.025	0.012	\pm 0.025	0.012	http://www.anachem.co.uk/catalogue/Pipettes/ElectronicPipettes/NewRaininE4XLS
Finnpipette Novus	Thermo Scientific	0.5-10	0.01/0.1**	\pm 0.035	0.03	\pm 0.12	0.08	http://www.thermoscientific.com/ecommerce/servlet/techresource?storeId=11152&langId=-1&taxonomy=4&resourceId=81630&contentType=Brochures&productId=11953334#

* employing Concept Utility Software V1.13

** multichannel version