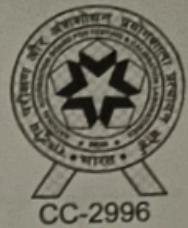




Ultra Cal

42, 1st Floor, 60 Feet Main Road, Srinivasanagar,
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Ultra Cal

CALIBRATION CERTIFICATE

Customer Name & Address : MEDRAY CLINICS PVT LTD.,
Laboratory, 3rd Floor, #962, 12 Main Road,
Doopannahalli, Indiranagar, Bangalore-560008

Customer's Reference: SRF No.: 1168 Dated : 24 Mar 2023

Calibration Certificate Number	Calibrated On	Recommended Calibration Due	Page Number
UC/23/1168-03	25 Mar 2023	24 Mar 2024	1 of 2

ULR No CC299623000001281F

Date of issue: 04 Apr 2023

Details of device under calibration (DUC):

DUC : Micro Pipette	Calibration Procedure No. : UC/CAL/205
Make : Avantor	No. of Pages : 2
Range : 100-1000 μ l	DUC Received : 24 Mar 2023
SI No. : 19217769	DUC Condition on receipt : Satisfactory
ID No. : ---	Cal At : Mass Lab.Ultracal

Environmental Conditions: Temp. : (23 \pm 2) $^{\circ}$ C , Relative Hum. : (40 to 60)%, Atm. Pressure: 912.7mbar

Standards used:

Sl. No.	Nomenclature	Make	Sl. No./ID No	Traceable to/ Cert. No.	Validity
1	Electronic Balance	Radwag	573977	LCGC / TC/8946/2022	04 July 2023

Note:

1. The Calibration Certificate relates only to the above DUC
2. Publication or reproduction of this certificate in any form other than by complete set of the whole certificate & in the language, written, is not permitted without the written consent of Ultracal.
3. Corrections/erasing, invalidate the Calibration certificate
4. Calibration of the DUC are traceable to National standards/International Standards
5. Any error in this certificate should be brought to our knowledge within 45 days from the date of this certificate.
6. Results Reported are valid at the time of and under the stated conditions of measurements.
7. The usage of NABL Symbol is as per NABL guidelines NABL 133

Calibrated By

Spoorthi.N.M

(Calibration Engineer)



Authorised By

Shreyas.B.V

(Technical Manager)

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Calibration Certificate Number

ULR No: CC299623000001281F

UC/23/1168-03

Page No: 2 of 2

Range : 100 - 1000 µl

Increment : 1 µl

Sl. No.	Micropipette Set Volume in µl	Standard Balance Reading in g	Actual Calculated Volume @ 27°C in µl	Average Volume in µl	Systematic Error, ± in µl	Random Error, in ± in µl
1	100	0.09954	99.89	99.79	-0.21	0.17
2		0.09919	99.54			
3		0.09936	99.71			
4		0.09955	99.90			
5		0.09939	99.74			
6		0.09914	99.49			
7		0.09946	99.81			
8		0.09953	99.88			
9		0.09968	100.03			
10		0.09956	99.91			
11	500	0.49835	500.10	500.47	0.47	0.81
12		0.49784	499.59			
13		0.49985	501.61			
14		0.49920	500.96			
15		0.49968	501.44			
16		0.49826	500.01			
17		0.49964	501.40			
18		0.49837	500.12			
19		0.49763	499.38			
20		0.49838	500.13			
21	1000	0.99643	999.93	998.65	-1.35	1.20
22		0.99415	997.65			
23		0.99332	996.81			
24		0.99662	1000.12			
25		0.99489	998.39			
26		0.99391	997.40			
27		0.99603	999.53			
28		0.99527	998.77			
29		0.99445	997.95			
30		0.99647	999.97			

Measurement Uncertainty : ± 0.30 µl upto 100µl

Conclusion / Remarks: 1.27 µl above 100µl

- 1 Measurement uncertainty is at confidence level 95% which corresponds to a coverage factor of k= 2.23
- 2 Calibration is performed as per ISO 8655 - 6 : 2002 (E)
- 3 Gravimetric Method is adopted for calibration

Calibrated By

Spoorthi.N.M

(Calibration Engineer)



Authorised By

Shreyas.B.V.
(Technical Manager)