

VeriFCM Cytometry Intensity Calibration

Stable calibration material for assessing instrument stability and precision in multiple channels

Product Information

Name :	VeriFCM 4 Channels Cytometry Intensity Calibration Beads	VeriFCM Low Intensity Calibration Beads
Catalog Number :	FP-BH3670, 3 ml	FP-BN2730, 3 ml
Absorption / Emission :	$\lambda_{exc}/\lambda_{em} = 488 / 510, 575 \text{ and } 633 \text{ nm, and } 635 / 700 \text{ nm}$	
Particle composition :	Polystyrene containing encapsulated dyes	
Size :	3 μm nominal diameter	6 μm nominal diameter
Concentration :	Approximately 5×10^6 particles/ml	Approximately 4×10^6 particles/ml
Particle density :	1.06 g/cm ³	
Content :	Dyed polymer microspheres in water	
Additives :	0.05% tween-20 dispersant / Surfactant with 2 mM sodium Azide Preservative	

Storage: +4°C. Do not freeze. Stable at least 1 year.

Introduction

VeriFCM Cytometry Intensity Calibration Beads

The VeriFCM Cytometry Intensity Calibration Beads are designed to simultaneously monitor flow cytometer stability and provide a check on instrument sensitivity and performance. Although the product can provide relative fluorescence estimations of labeled cells (MEFL) – it is not designed for quantitation of fluorochromes on cells.

The calibrator is a mixture of uniform microspheres with three dyes in seven different fluorescent intensity (Figure 1). Due to the high uniformity of the microspheres, singlet gating is not required. The calibrator consists of a single vial of fluorescent beads precisely stained with fluorescent dyes that have optimized intensity and broad emission in multiple channels (FITC, PE, PE-Cy5, PE-SulfoRhodamine 101, APC, APC-Cy7). Each intensity level has an MEFL (mean equivalent fluorochrome)* value for estimation of relative fluorescence intensities of labeled cells.

The VeriFCM Cytometry Low Intensity Calibration Beads are designed to optimize your instrument for dimly labeled cell analysis.

It contains 50% 6 μm diameter, dimly labeled beads (mixture of fluorescent green, orange, and red dyes) and 50% 6 μm diameter blank beads (no dye). In many flow cytometry applications, it is critical to be able to separate dimly labeled cells from unlabeled (autofluorescent) cells. This calibrator is designed to imitate a mixture of unlabeled and dim labeled cells.

* MEFL has also been referred to as Molecules of Equivalent Soluble Fluorochrome (MESF). The MEFL values provided are not traceable to a standard reference material.

Directions for use

Handling and Storage

Mix product by gentle inversion by hand or vortex mixer.

Data from FACSCalibur®, Becton Dickinson, San Jose, CA.

Results on different instruments may vary.

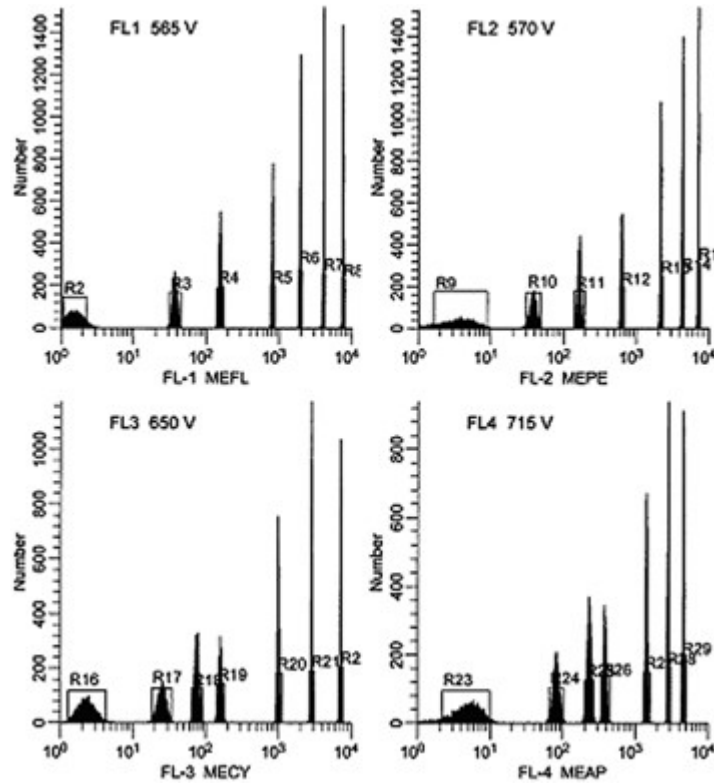


Figure 1: VeriFCM 4 Channels Cytometry Intensity Calibration Beads .

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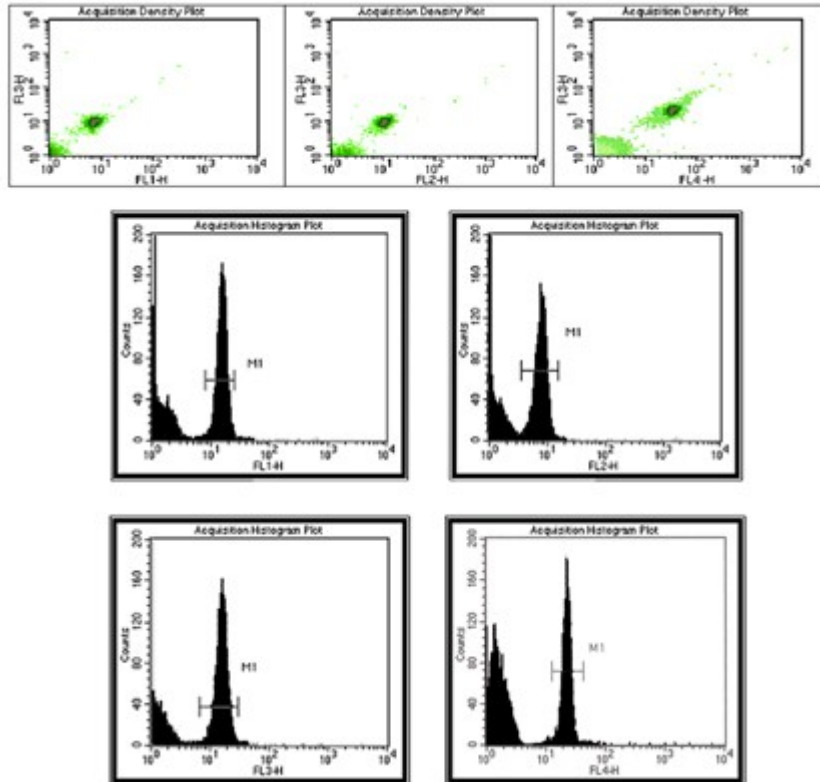
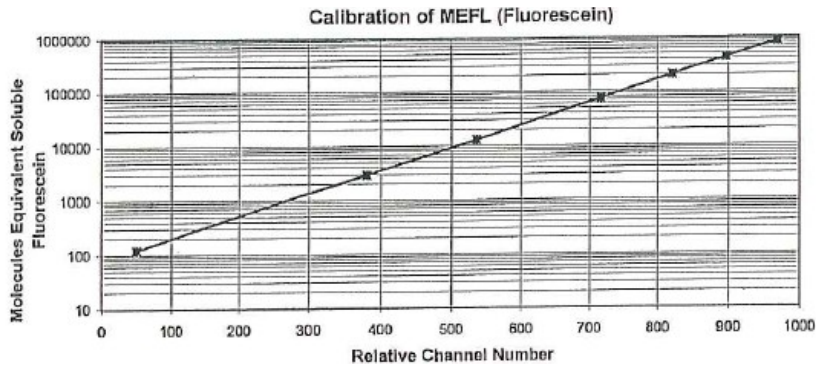
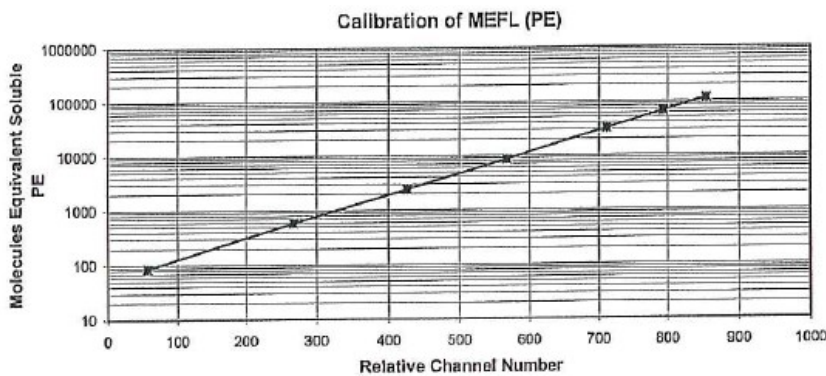


Figure 2: VeriFCM Cytometry Low Intensity Calibration Beads .

Calibration of MEFL with VeriFCM 4 Channels Cytometry Intensity Calibration Beads

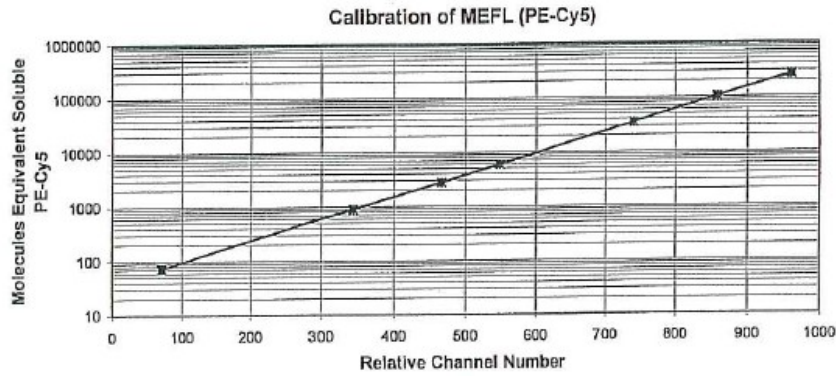


Intensity	MEFL
Level 1	123
Level 2	2950
Level 3	13062
Level 4	74238
Level 5	203419
Level 6	421943
Level 7	834197

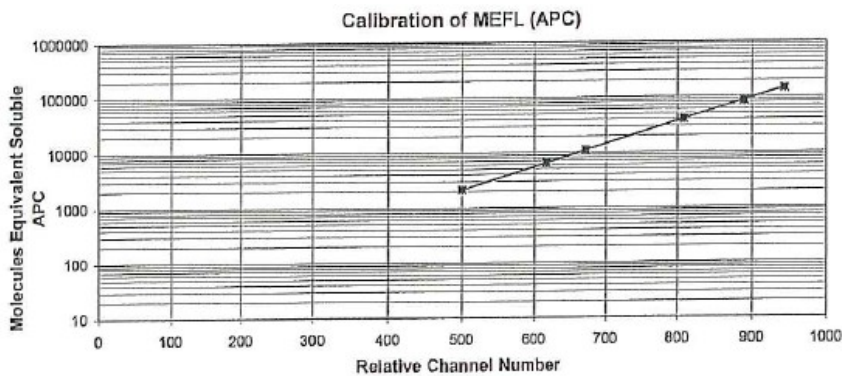


Intensity	MEFL
Level 1	86
Level 2	583
Level 3	2416
Level 4	8517
Level 5	31408
Level 6	65697
Level 7	113756

FT-BN273



Intensity	MEFL
Level 1	73
Level 2	900
Level 3	2764
Level 4	5877
Level 5	34379
Level 6	102744
Level 7	260196



Intensity	MEFL
Level 1	no data
Level 2	2132
Level 3	6478
Level 4	10923
Level 5	39761
Level 6	85832
Level 7	142010

Related products

- VeriFMC 488 Cytometry Alignment Beads, FP-BN2740
- VeriFMC 633 Cytometry Alignment Beads, FP-BN2750

Ordering information

Catalog size quantities and prices may be found at <http://www.fluoprobes.com>
Please inquire for higher quantities (availability, shipment conditions).

For any information, please ask : FluoProbes® / Interchim; Hotline : +33(0)4 70 03 73 06

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