# Certificate of Analysis



# **AcGFP Flow Cytometer Calibration Beads**

Catalog No(s).AmountLot Number63259420 assays1509005

## **Description**

The AcGFP Flow Cytometer Calibration Beads allow for easy calibration of any flow cytometer with a 488 nm laser line that excites the green fluorescent proteins AcGFP1 (*Aequorea coerulescens* GFP) and EGFP. The excitation/emission spectrum and brightness of AcGFP are almost identical to those of EGFP. The beads consist of a mixture of six distinct populations that vary in the number of attached AcGFP1 molecules, giving each population a distinct fluorescent signature. The value for the corresponding Molecular Equivalent of Soluble Fluorophore (MESF) per peak was determined by correlating the fluorescence intensity of each respective bead population with the amount of soluble AcGFP1 yielding the same fluorescence intensity. The lowest intensity represents the autofluorescence signal of cells not expressing green fluorescent protein, while the five remaining peaks are evenly distributed over the remaining scale of the green fluorescence detection channel.

## **Package Contents**

- 0.4 ml AcGFP Flow Cytometer Calibration Beads (contains 0.05% NaN<sub>3</sub>)
- 20 ml 1X Flow Cytometer Calibration Beads Dilution Buffer

## **Storage Conditions**

• Store all components at 4°C. Do not freeze beads.

### **Shelf Life**

1 year from date of receipt under proper storage conditions.

### **Shipping Conditions**

• Blue ice (4°C)

#### **Product Documents**

Documents for Clontech® products are available for download at <a href="www.clontech.com/manuals">www.clontech.com/manuals</a> The following documents apply to this product:

• Flow Cytometer Calibration Beads Protocol-At-A-Glance

AcGFP Flow Cytometer Calibration Beads

## **Quality Control Data**

The AcGFP Flow Cytometer Calibration Beads were analyzed via flow cytometry using a 488 nm laser line. The peak representing the lowest intensity was adjusted to fall in the window between  $1 \times 10^0$  and  $1 \times 10^1$  with a mean fluorescent intensity of around  $2.0 \pm 1$ . At this setting, the remaining bead populations showed 5 distinct, well-separated peaks. The peak with the highest fluorescent intensity showed a mean fluorescent intensity of  $\geq 1 \times 10^3$ .

The MESF values for the different peaks in this lot were determined to be:

Peak #	MESF
1	74,471
2	164,770
3	410,977
4	1,291,440
5	7,372,326
6	18,463,961

The mean fluorescence intensity values for the 6 different peak fractions obtained by flow cytometry showed a linear correlation to the corresponding MESF values.

(080713) Page 2 of 2

# **Notice to Purchaser**



# **AcGFP Flow Cytometer Calibration Beads**

### CATALOG NO.

632594

#### NOTICE TO PURCHASER:

Our products are to be used for research purposes only. They may not be used for any other purpose, including, but not limited to, use in drugs, in vitro diagnostic purposes, therapeutics, or in humans. Our products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products or to provide a service to third parties without prior written approval of Clontech Laboratories, Inc.

Your use of this product is also subject to compliance with the licensing requirements listed below and described on the product's web page at <a href="http://www.clontech.com">http://www.clontech.com</a>. It is your responsibility to review, understand and adhere to any restrictions imposed by these statements.

#### **STATEMENT 39**

AcGFP is covered by U.S. Patent No. 7,432,053.

### TRADEMARKS:

Clontech and the Clontech logo are trademarks of Clontech Laboratories, Inc.

All other marks are the property of their respective owners. Certain trademarks may not be registered in all jurisdictions. Clontech is a Takara Bio Company. ©2015 Clontech Laboratories, Inc. This document has been reviewed and approved by the Clontech Quality Assurance Department.

Clontech Laboratories, Inc.

A Takara Bio Company 1290 Terra Bella Avenue, Mountain View, CA 94043, USA U.S. Technical Support: tech@clontech.com

10/28/2015