

BacMam Enhancer Kit

Catalog no. B10107

Table 1. Contents and storage information.

Material	Amount	Storage*	Stability
BacMam enhancer (Component A)	2 vials	<ul style="list-style-type: none"> • 2–6°C • Desiccate • Protect from light • DO NOT FREEZE 	When stored as directed, the product is stable for at least 6 months.
Dimethylsulfoxide (DMSO, Component B)	2 × 120 µL		

*These storage conditions are appropriate when storing the entire kit upon receipt. For optimal storage conditions for each component, see labels on the individual vials.

Number of assays: Sufficient material is supplied for 100 coverslips or 10 × 96-well plates, based on the protocol below.

Introduction

The BacMam Enhancer Kit provides researchers using BacMam reagents with additional BacMam enhancer. The BacMam enhancer can help to increase the expression of BacMam reagents in mammalian cells (Tables 2 and 3). Because different cell types vary in their response to the BacMam enhancer, we recommend optimizing the amount of the BacMam enhancer and the treatment time for best results. Each kit provides sufficient material for treating 100 coverslips or 10 × 96-well microplates. For additional information about the powerful BacMam delivery technology and BacMam-based products, refer to www.invitrogen.com/bacmam.

Table 2. Premo™ Biosensors.

Product	Ex/Em*	Detection	Cat. no.
Premo™ Halide Sensor *for 10 microplates*	515/530	Decrease in fluorescence emission at 530 nm upon chloride-channel activation	P10229
Premo™ Cameleon Calcium Sensor *for 10 microplates*	435/480 (CFP); 435/530 (YFP)	Ratiometric indicator with an increase in YFP emission and a simultaneous decrease in CFP emission upon binding Ca ²⁺	P36207
Premo™ Cameleon Calcium Sensor *for 100 microplates*			P36208
Premo™ FUCCI Cell Cycle Sensor	485/520 (GFP); 555/584 (RFP)	Red-to-yellow-to green fluorescent nuclei represent progression through cell cycle and division (G1 red-fluorescent nuclei; G1/S transition yellow-fluorescent nuclei; G2/M green nuclei)	P36232

*Excitation and emission maxima in nm.

Table 3. Organelle Lights™ and Cellular Lights™ Reagents.

Target	Cat. no.				
	CFP (435/485)*	GFP (485/520)*	YFP (500/535)*	OFP (550/580)*	RFP (555/584)*
Actin		C10126			C10127
CSFr1 ¹		C10087			
Cytosol		O36227			
Endoplasmic reticulum		O36212		O36223	O36230
Endosomes		O10104			O36231
Exoc1 ²			C10079		
Golgi complex		O36215		O36224	O10098
Histone 2B		C10128			C10129
Lysosomes		O36228			O10100
MAP4 ³		C10105			C10140
Mitochondria		O36210		O36222	O36229
Nuclear envelope		O36213			
Nucleus	O36218	O36209			O10099
Peroxisomes		O36211			
Plasma membrane	O36216	O36214		O36226	O10139
Synaptophysin		C10080			O10138
Talin		C10323			C10324
Tubulin		C10106			C10112

*Excitation and emission maxima in nm; **1.** colony stimulating factor receptor 1; **2.** excocyst complex component 1; **3.** microtubule-associated protein.

Before Starting

Cautions BacMam enhancer (Component A) may cause sensitization by skin contact, and it is harmful if inhaled or swallowed. In case of contact with eyes, rinse immediately with plenty of water, and seek medical advice. Wear suitable laboratory protective clothing and gloves while handling this reagent.

DMSO (Component B) is known to facilitate the entry of organic molecules into tissues. Handle reagents containing DMSO using equipment and practices appropriate for the hazards posed by such materials. Dispose of the reagents in compliance with all pertaining local regulations.

Preparing the BacMam

Enhancer Stock Solution 1.1 Prepare a 1000X BacMam enhancer solution by dissolving the entire contents of the BacMam enhancer (Component A) in 100 µL of DMSO (Component B). Aliquot and store the stock solution at 2–6°C, protected from light. When stored as directed, the BacMam enhancer stock solution is stable for up to 6 months.

Experimental Protocol

Treating Cells with BacMam Enhancer

The following protocol is based on a 2 mL labeling volume and ~ 5,000 cells treated with a BacMam reagent and plated in a 35 mm dish or 1 well of a 6-well culture plate. For applications that require a larger number of cells, i.e., flow cytometry or high-content screening (HCS), we recommend plating the cells in a 10 cm dish or a T75 flask, and increasing the labeling volume to 10 mL.

- 2.1 While the cells are incubating with the BacMam reagent transduction solution, prepare the 1X BacMam enhancer working solution by diluting the 1000X BacMam enhancer stock solution (prepared in step 1.1) 1:1000 in complete media (i.e., add 2 µL of 1000X BacMam enhancer stock solution to 2 mL of complete media).
- 2.2 Remove the BacMam reagent transduction solution, and add the 1X BacMam enhancer working solution (prepared in step 2.1) to each dish or well. Incubate for 60–90 minutes under normal growth conditions.
- 2.3 Remove the 1X BacMam enhancer working solution and replace it with normal growth medium. Return the cells to normal growth conditions for ≥16 hours.

Product List Current prices may be obtained from our website or from our Customer Service Department.

Cat. no.	Product Name	Unit Size
B10107	BacMam Enhancer Kit	1 kit

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