Happy Cell® ASM Flow Cytometry Reagent – Preparation & Use

User Guide

About Happy Cell® ASM Flow Cytometry Reagent

Vale Happy Cell® ASM Flow Cytometry Reagent is specially developed to support research in the field of Flow Cytometry. It keeps cells in suspension and maintains cellular size consistency in the population removing the problems of passive cell sedimentation.

Catalogue Number: VHCFC

Components

- 1 x 20 mL bottle of Happy Cell® ASM Flow Cytometry reagent supplied as 2X concentrate. Formulated in Ca++ and Mg free PBS++.

If you desire these or any other supplements can be added.

Additional Items Required

- Phosphate Buffered Saline (PBS)
- Desired additives (eg glucose, EDTA, protein source such as serum or bovine serum albumin)
- Appropriate flow cytometry consumables

Storage and Expiry

Stable until expiry date on bottle if stored at 2-8°C. DO NOT FREEZE.

Ship at ambient temperature.

Preparation and Use

Happy Cell® ASM Flow Cytometry is supplied as a 2X concentrate. It is readily diluted with standard PBS.

It is compatible with commercially available flow cytometers and with live as well as fixed cells.

To use, simply prepare Happy Cell® ASM Flow Cytometry at the required concentration including your preferred additives, re-suspend cells at the desired density, and proceed with flow cytometry protocol.

At 40° C cells are viable for several hours.

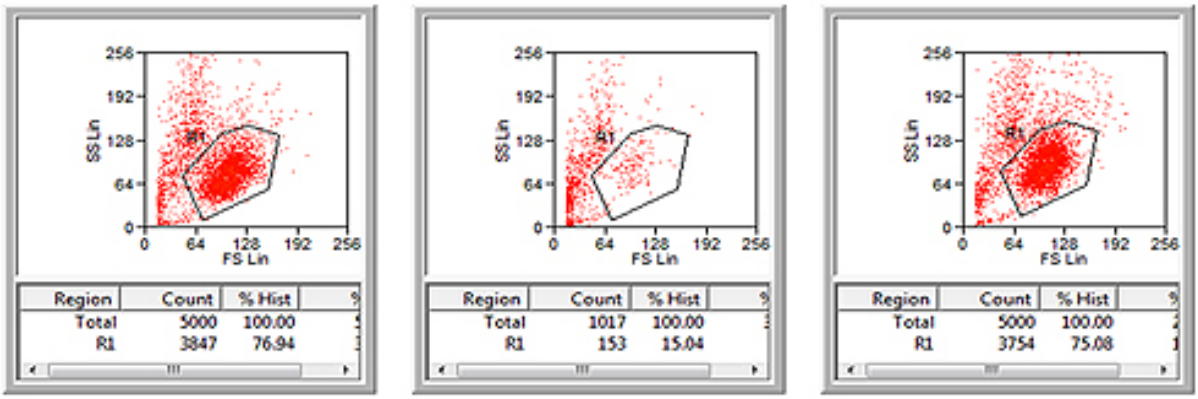
To prolong cell viability, we recommend you add glucose and/or a protein source such as bovine serum albumin (BSA) or Fetal Bovine Serum (FBS), as well as keeping temperatures at 40°C.

Tests of various cell types in Happy Cell® ASM Flow Cytometry have shown consistent suspension for periods ranging from for 1 to 12 hours (See Figure 1 below). We recommend you conduct tests on your cells beforehand to determine that they will be viable for the expected duration of your experiments.

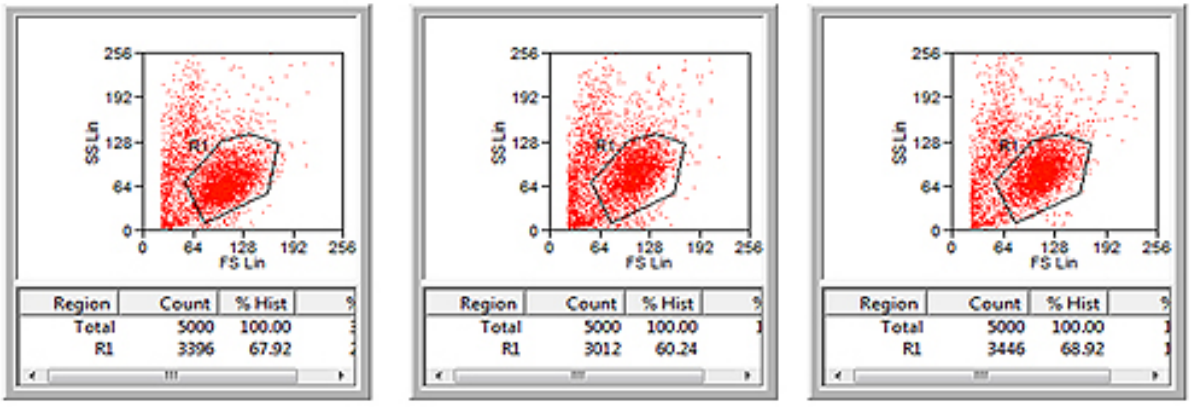
As with all new experimental procedures and reagents, we recommend performing optimisations before embarking on important experiments.

Flow Cytometry Analysis

Base Media



Happy Cell® ASM



T= 0 (Cells mixed and analyzed)

T= 60 (Cells Analyzed After Static Incubation)

T= 60 (Cells Analyzed After re-suspension)

Figure 1. Flow cytometry performed by Ann Atzberger Institute of Molecular Medicine Trinity College Dublin.

HuT 78 cells were suspended in both base media (PBS) and Happy Cell® ASM Flow Cytometry reagent (1X concentration). Cell counts were recorded (T=0) and suspensions were left to stand for 60 minutes. After 60 minutes cell counts were re-assessed before and after re-suspension (T=60). Cell counts obtained from base media alone were dramatically reduced after the 60 minute incubation and were restored to T=0 values only after re-suspension. Cell count values in Happy Cell® ASM Flow Cytometry reagent remained unchanged throughout the duration of the All cell measurements were performed using a Beckman Coulter CYAN ADP flow cytometer.

Safety warnings and precautions

For research use only.

Not recommended or intended for diagnosis of disease in humans or animals.

Do not use internally or externally in humans or animals.

All chemicals should be considered as potentially hazardous. We therefore recommend this product be handled only by persons trained in laboratory techniques and that it is used in accordance with the principles of good laboratory practice. Wear suitable protective clothing such as laboratory overalls, safety glasses and gloves. Care should be taken to avoid contact with skin or eyes. In the case of contact with skin or eyes wash immediately with water. See material safety data sheet(s) and/or safety statement(s) for specific advice.