

## Additive FS 100X

Reference: TP10007

## Solvent FS 100X

Reference: TP10008

For research use only



Expiration date

2-8°C

Store at temperature range 2°C to 8°C

LOT

Lot number

REF

Reference number



Increasing sensitivity, improving diagnostics

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## 1 – INTRODUCTION

The Additive FS 100X diluted in Solvent FS is a solution that, combined to the Buffer TAS, enhances the ApoH protein attachment to **viruses**. The ApoH protein, also known as Apolipoprotein H or Beta-2 glycoprotein 1, is able to bind various micro-organisms, including **viruses** (1-2), **fungi** (3) and **bacteria** (4-6). This **multiplex affinity capture** method proves to be simple, soft and fast enough so that the micro-organisms retain their viability and infectivity. The captured micro-organisms **are concentrated and separated from potential inhibitors** and so become easier to identify/detect with increased sensitivity (7-10).

The Additive and Solvent FS 100X are also recommended for the use of the synthetic Peps6 molecule derived from the ApoH protein.

## 2 – REAGENTS

**REF** TP10007 – Additive FS 100X

Additive FS is supplied as a light-sensitive powder to be diluted with Solvent FS 100X. Dilute before use.

**REF** TP10008 – Solvent FS 100X

Solvent FS is an aqueous solution for the resuspension of Additive FS concentrated 100X. Do not dilute before adding to Additive FS.



## 3 – STORAGE

- Store at 2-8°C upon reception.
- All unopened reagents remain stable at 2-8°C until the expiration date.
- After use, discard the remaining Solvent FS.
- Opened Additive FS, in **solid form**, is stable at 2-8°C until the expiration date. After resuspension in Solvent FS, it is light-sensitive and heat-sensitive. Therefore, the **liquid form** of Additive FS must be stored away from light at -20°C, where it remains stable until the expiration date.

## 4 – SAFETY AND PRECAUTIONS

- For better stability, all reagents must be handled with care to **avoid any contaminations**.
- The need for a **sterile work area** will be determined by the type of micro-organism and its use once captured (mandatory for culture).
- Reagents and specimens should be handled in accordance to good laboratory practices. Dispose of unused reagents, samples and wastes in accordance with local regulations.
- Do not use out-of-date reagents.

## 5 – INSTRUCTIONS FOR USE

### First use: dilute Additive FS

Add Solvent FS 100X into the Additive FS 100X, the required volume is noted on the label. Vortex for 1 full minute, both upright and upside down. Leave the tube at room temperature for 10 minutes and vortex again for 1 full minute.

The Additive FS is now in liquid form, still at 100X concentration. It should be aliquoted in several tubes for future use.

### For use with ApoH or Peps6 magnetic beads

- Dispense sample in a capture tube. Measure volume.
- Add 4 volumes of TAS 1X or other capture buffer.
- Add 0.05 volumes Additive FS 100X (optional).
- Vortex sample diluted in capture buffer.
- Follow instructions for adding and processing beads.

Example:

1 mL sample + 4 mL TAS 1X + 50 µL FS 100X + 10 µL ApoH beads

## 11 – TROUBLESHOOTING

Some guidelines are given below. Please contact our technical support for any remaining questions, for further information or for protocols tailored to your specific application:

[info@apohtech.com](mailto:info@apohtech.com)

- According to the micro-organism or the sample, the Additive FS may be used in combination with other capture buffers than the Buffer TAS.
- All FS diluted samples should be rapidly put in contact with the ApoH protein or Peps6 molecule.
- Do not use Additive FS for viral capture if cell infection is planned.
- Do not use FS additive when isolating ISAV virus (Orthomyxoviridae).
- Add FS additive for other viruses or when sample also contains bacteria.
- Check that Additive FS is indeed **1X concentrated** when mixed in the sample.
- The liquid form of Additive FS (after resuspension in Solvent FS) is a clear liquid that will turn light yellow when improperly stored. Discard yellowish Additive FS which reduces capture efficiency and use a new Additive FS aliquot.
- Strictly follow the Additive FS guidelines for resuspension. Incorrect (short) resuspension will lead to sub-optimal results. Do not heat!
- Choose a test tube big enough to ensure correct agitation, for example: use a 1.5 mL tube for a 1 mL reaction.

## 12 – BIBLIOGRAPHY

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