

Signal Guard™ phosphatase reaction stopping solution

Catalog number: 11622

Unit size: 100 mL

Component	Storage	Amount
Signal Guard™ phosphatase reaction stopping solution	Refrigerate (2-8 °C)	100 mL

OVERVIEW

Alkaline and acid phosphatases are the hydrolase enzymes responsible for dephosphorylation of molecules such as nucleotides, proteins and alkaloids under alkaline and acidic conditions, respectively. Some phosphatases assays and tests require the phosphatase reactions to be stopped for further analysis using the stop solutions. Our Signal Guard™ phosphatase reaction stopping solution is a ready to use reagent that provides a convenient tool for terminating fluorescence and colorimetric signal-generating phosphatase reactions at a user-determined time point, and also keep the fluorescence or colorimetric signal stable for up to 18 hours. The Signal Guard™ phosphatase reaction stopping solution is optimized and compatible with alkaline, acid and protein phosphatase. Compared to other commercial phosphatase stopping reagents, our Signal Guard™ phosphatases reaction stopping solution is nearly neutral and mild. It is compatible with a vast majority of colorimetric and fluorimetric phosphatase substrates while the stop reagents from other vendors are not compatible with most of fluorescence-based phosphatase assays due to their extremely high pH.

SAMPLE EXPERIMENTAL PROTOCOL

Assay Protocol for one 96-well plate

1. Warm the Signal Guard™ phosphatase reaction stopping solution to room temperature.
2. At the desired stopping time point, add 50 μ L of Signal Guard™ phosphatase reaction stopping solution per 200 μ L volume in each microplate well.

Note For other reaction volumes, adjust the addition of Signal Guard™ Phosphatase reaction stopping solution proportionally (e.g. add 5 μ L to a 25 μ L reaction volume). The signal level should remain stable for at least 18 hours.

EXAMPLE DATA ANALYSIS AND FIGURES

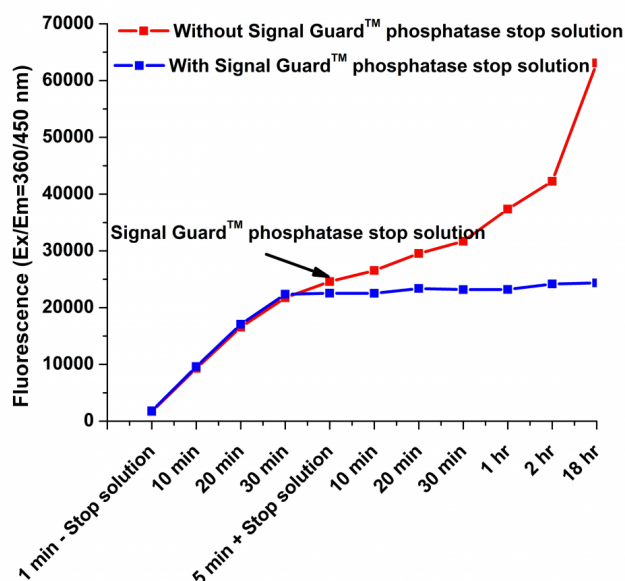


Figure 1. The application of Signal Guard™ phosphatase reaction stopping solution in Acid phosphatase fluorescence (AAT Bioquest Cat#11627) assay. Two parallel reactions containing 100 mU/mL Acid phosphatase was initiated by adding 200 μ L reaction mixture. Reactions were incubated at room temperature for times indicated above and then 50 μ L Signal Guard™ phosphatase reaction stopping solution was added to one reaction. The plots demonstrated that the reaction is completely inhibited by Signal Guard™ phosphatase reaction stopping solution.

DISCLAIMER

AAT Bioquest provides high-quality reagents and materials for research use only. For proper handling of potentially hazardous chemicals, please consult the Safety Data Sheet (SDS) provided for the product. Chemical analysis and/or reverse engineering of any kit or its components is strictly prohibited without written permission from AAT Bioquest. Please call 408-733-1055 or email info@aatbio.com if you have any questions.