

SAPE Conjugate Performance and Stability from Moss Inc.

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Introduction

- Moss Inc. streptavidin-R-phycoerythrin (SAPE) conjugates excel in diagnostic, molecular and cellular fluorescence detection assays based on biotin labeling
- Moss SAPE conjugates are provided in liquid stable, ready to use form and are suitable for use in various Luminex assays, multiplexing platforms, and microarrays
- Moss SAPE conjugation technology produces conjugates that result in exceptional signal-to-noise ratios, high titers, and the conjugates can also be customized to maximize performance for specific platform applications

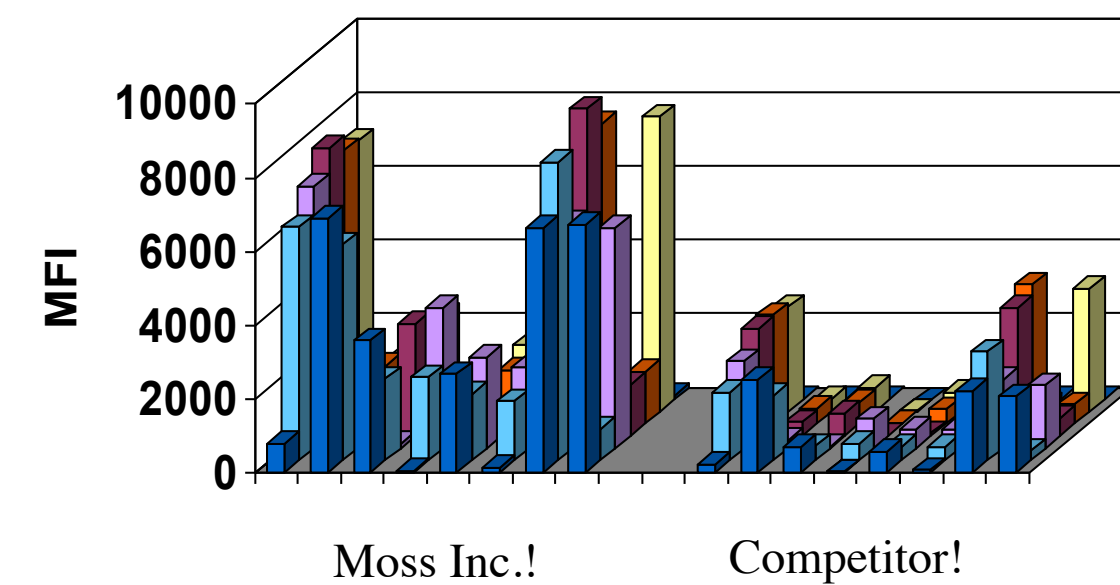
SAPE FRET Test Principle

- The FRET test is a homogeneous assay for testing PE conjugates
- SAPE serves as the fluorescence resonance energy transfer (FRET) donor conjugate in the test
- Biotinylated-allophycocyanin (BAPC) is the energy transfer acceptor conjugate
- Conjugates and reagents are mixed together in microtiter plate wells, and then the fluorescence intensity is measured after 15 minutes

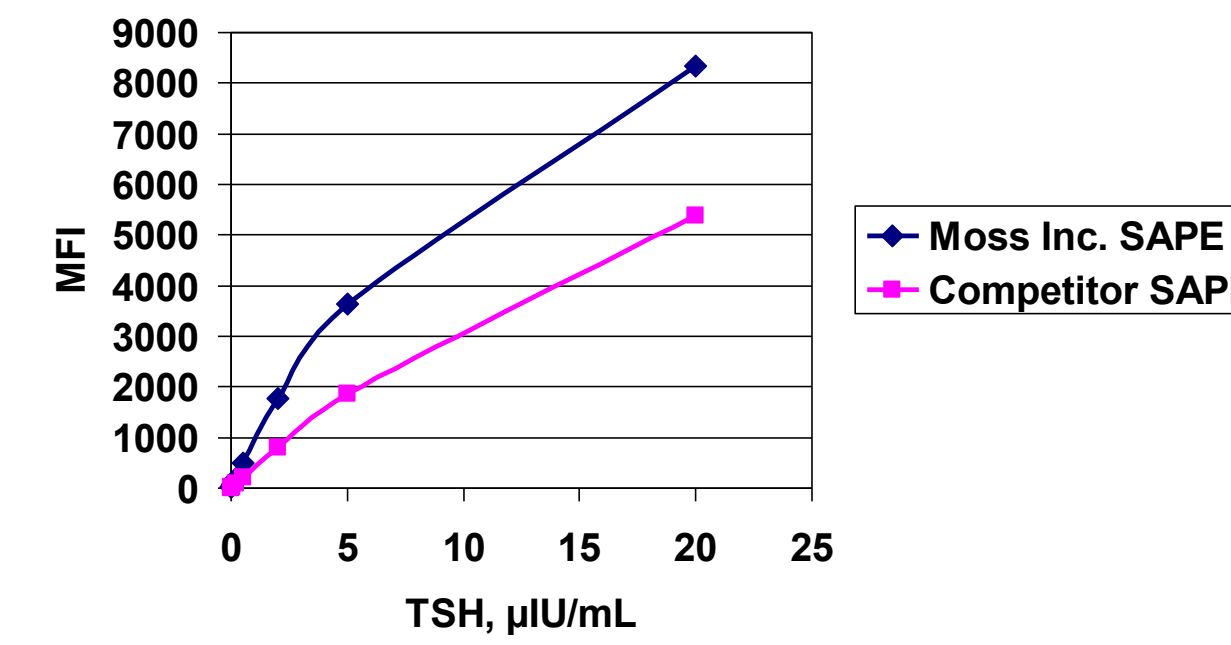
Significance of FRET Results

- Bound SAPE donor fluorescence, F , is divided by the fluorescence of the donor alone, F_0
- No binding results in no energy transfer and $F/F_0 = 1.00$
- A binding interaction between donor and acceptor results in fluorescence resonance energy transfer and $F/F_0 < 1.00$
- The smaller the F/F_0 value, the stronger the binding interaction

Moss Inc. SAPE Has More Signal Intensity to Detect Bi-Allelic Biotinylated Target Sequences in a Luminex Thrombophilia Assay

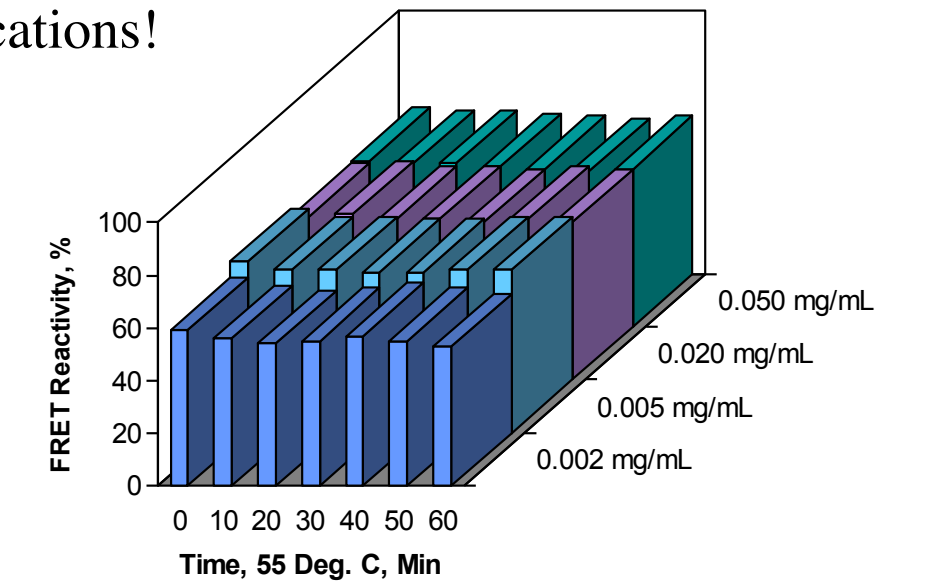


Moss Inc. SAPE Gives Greater Signal Intensity Than a Competitor in a Luminex TSH Assay

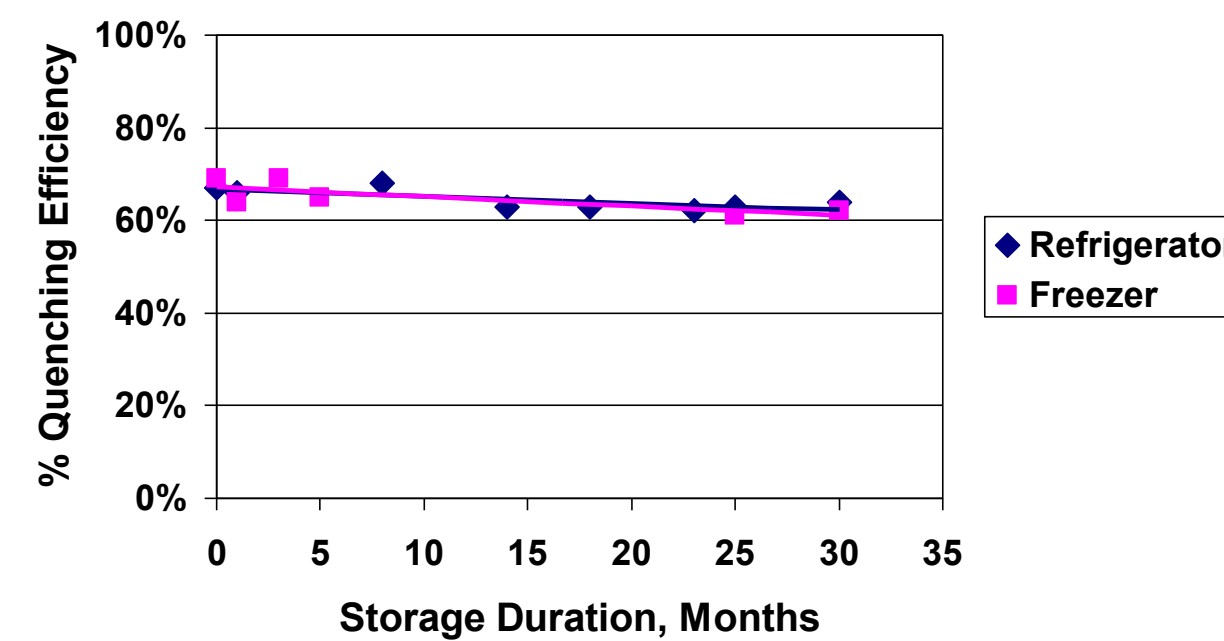


SAPE High Temperature Stability

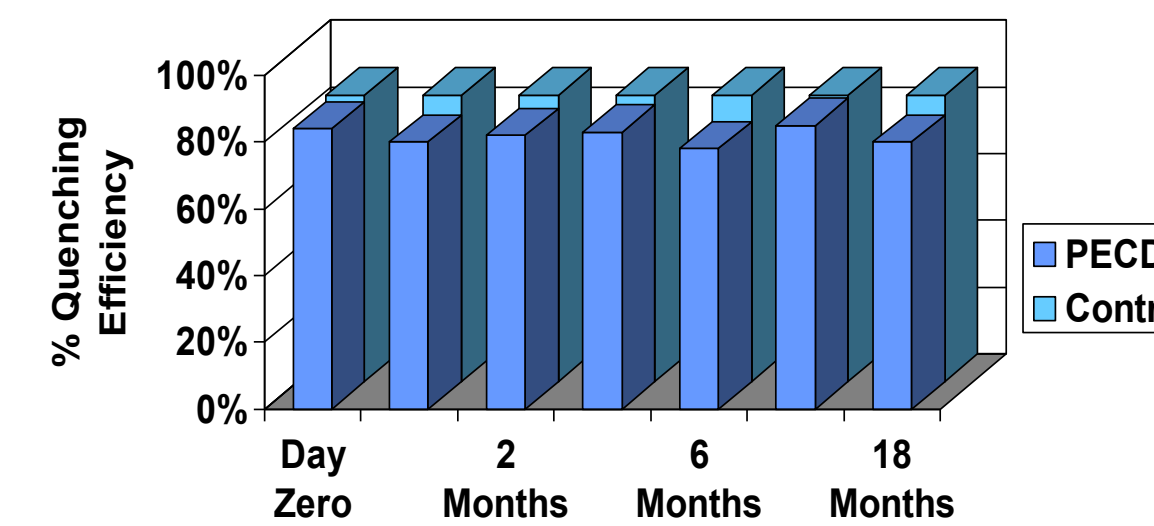
- SAPE signal is thermostable at 55°C for PCR applications!



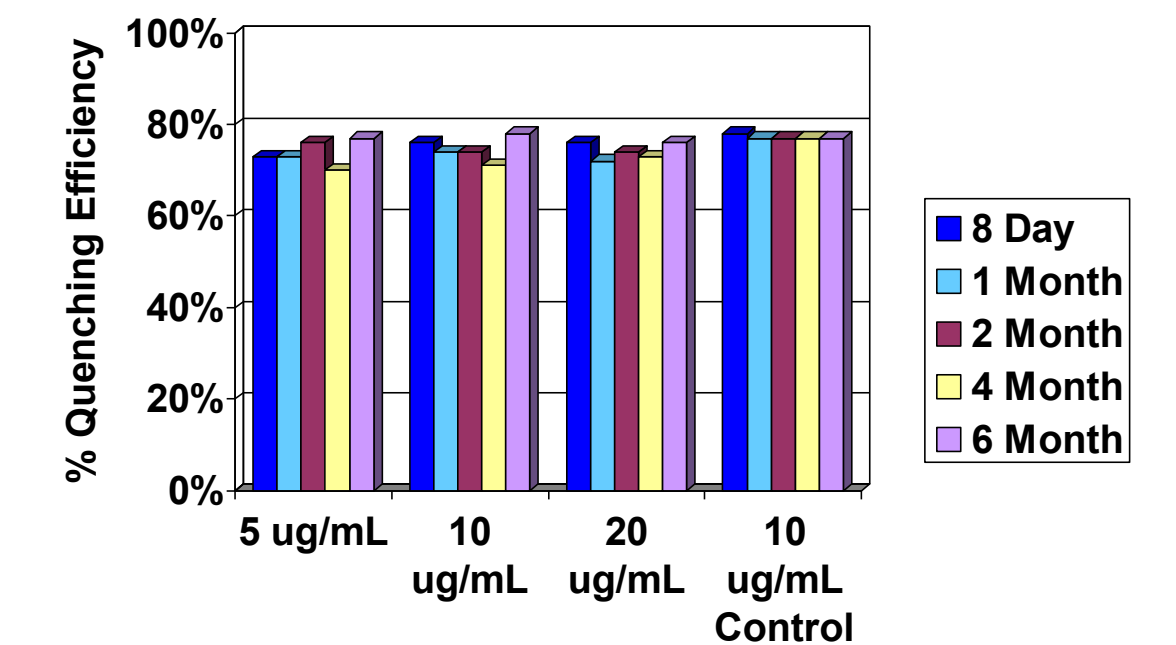
SAPE with 50% Glycerol and 15 mg/mL BSA 30 Months Refrigerator and Freezer Stability



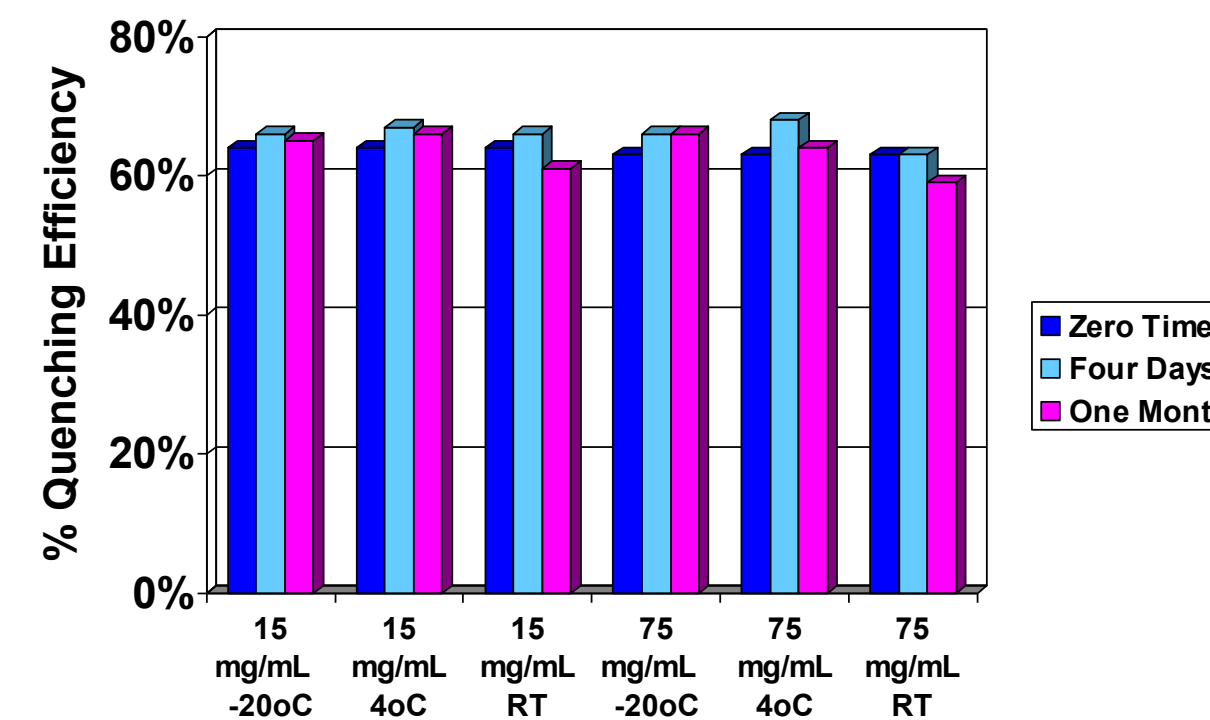
SAPE 10 µg/mL Refrigerated Stability in PECD Conjugate Stabilizing Diluent by FRET Quenching Assay



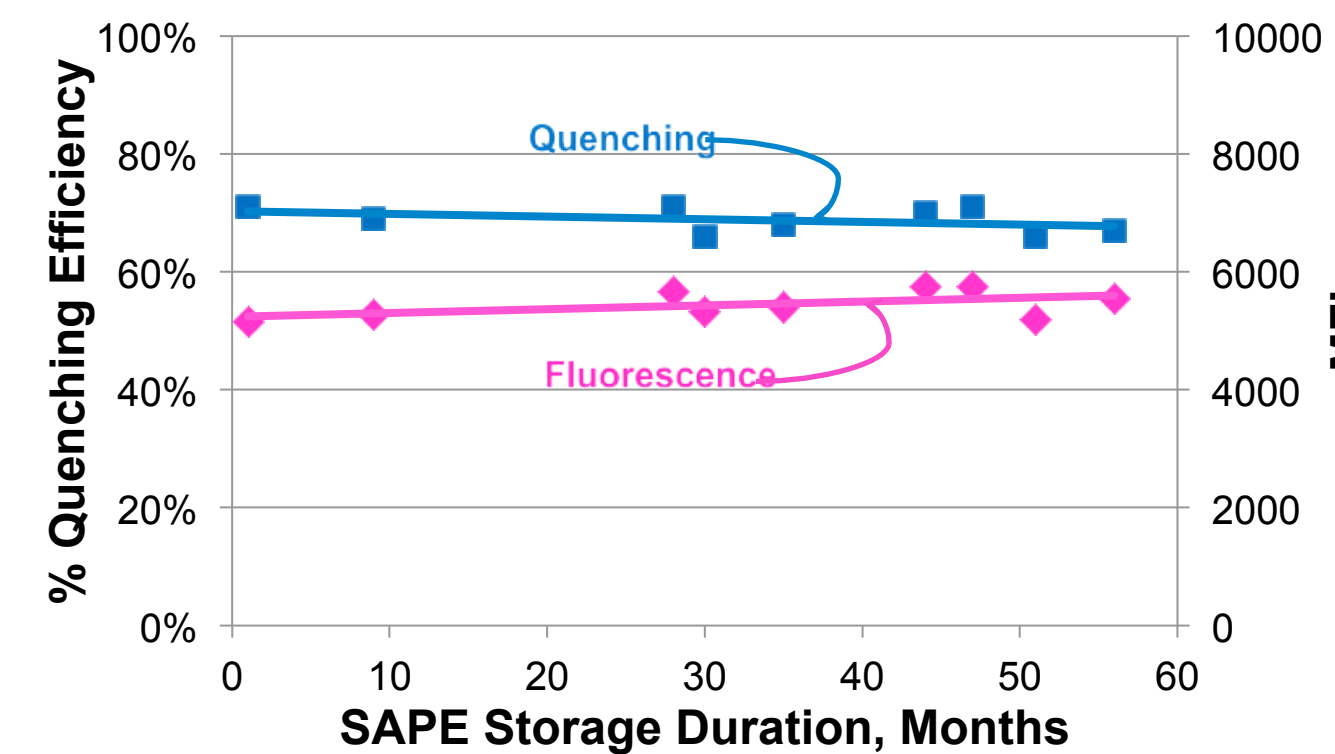
SAPE Ambient Temperature Storage Stability of Various Dilutions in PECD Conjugate Stabilizing Diluent by FRET Quenching Assay



SAPE with 50% Glycerol and 15 or 75 mg/mL BSA Three Temperature Storage Stability



SAPE Has a Long Shelflife on Refrigerated Storage



Moss Inc. SAPE Conjugates

- Superior performance
- Excellent liquid stability provides a long shelflife
- Ready to use from the bottle
- Available in milligram to gram amounts
- Custom made conjugates – please inquire