

Quinine Sulfate Assay Linearity, Reproducibility and Sensitivity

Introduction

The stability of the inherent fluorescence of quinine sulfate makes it one of the most commonly used reference standards for monitoring relative fluorescence intensities. Fluorescence measurement intensities often vary due to both instrument and sample specific parameters. The Thermo Scientific NanoDropTM 3300 Fluorospectrometer can measure as little as 1 ul of sample, thereby significantly scaling-down the reaction volumes commonly needed for conventional cuvette-based fluorometers.

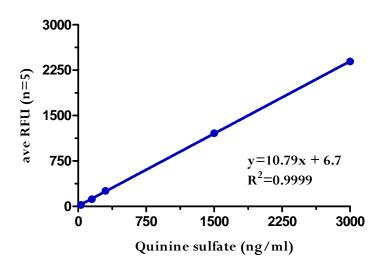
Method

Serially diluted quinine sulfate was measured using the UV LED excitation source with the emission wavelength monitored at 495 nm.

Results

Picograms of Quinine Sulfate per assay	Quinine sulfate (ng/ml)	Ave RFU (n=5)	Stdev	%CV
60	30	24	1	3.1
300	150	119	4.7	3.7
600	300	257	22.1	8.4
3000	1500	1209	94.6	7.8
6000	3000	2393	94.1	3.9

Quinine Sulfate Linearity on the NanoDrop 3300



Linearity was shown between 30 ng/ml to 3000 ng/ml.