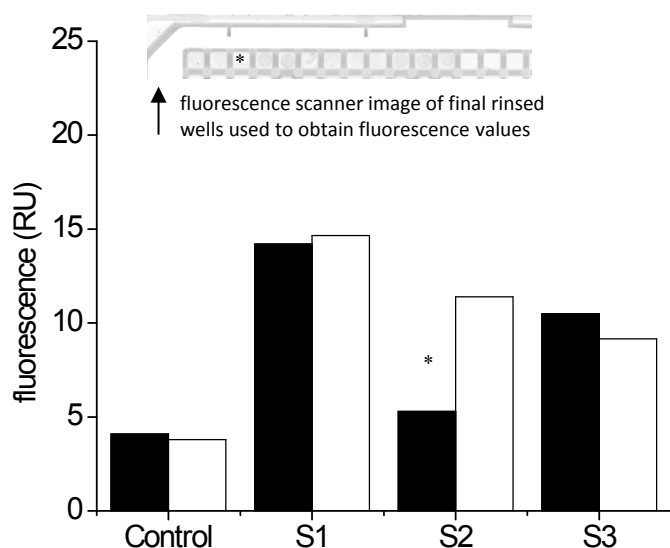


**Figure SI1.** Comparison of the sample testing format, preparation for analysis, and sample analysis method for the microplate method and two validation procedures.

Procedure	Purpose	Sample testing	Preparation for Analysis	Sample Analysis
Validation #1-full-sized samples with microscope	Validate miniaturized high-throughput method	Full-sized samples soaked and/or cleaned in full-sized vessels	Punch and mount on slide or any compatible flat optical quality surface	Confocal microscopy
Validation #2-samples tested in microplate but results read with microarray fluorescence scanner	Validate use of microplate reader for endpoint measurement	Similar to microplate method but with 96-well plate due to resolution and sensitivity limitation of array scanner	Samples tested directly in microplate	Fluorescence array scanner
Microplate Method		3mm biopsy punches in standard 384-well microplates	Samples tested directly in microplate	Microplate fluorescence reader



**Figure SI2.** Comparison of data obtained with a flatbed fluorescence scanner (through the bottom of the wells) and in the microplate fluorescence reader. White bars: data from fluorescence scanner, Black bars: data from microplate reader scaled by 10x.