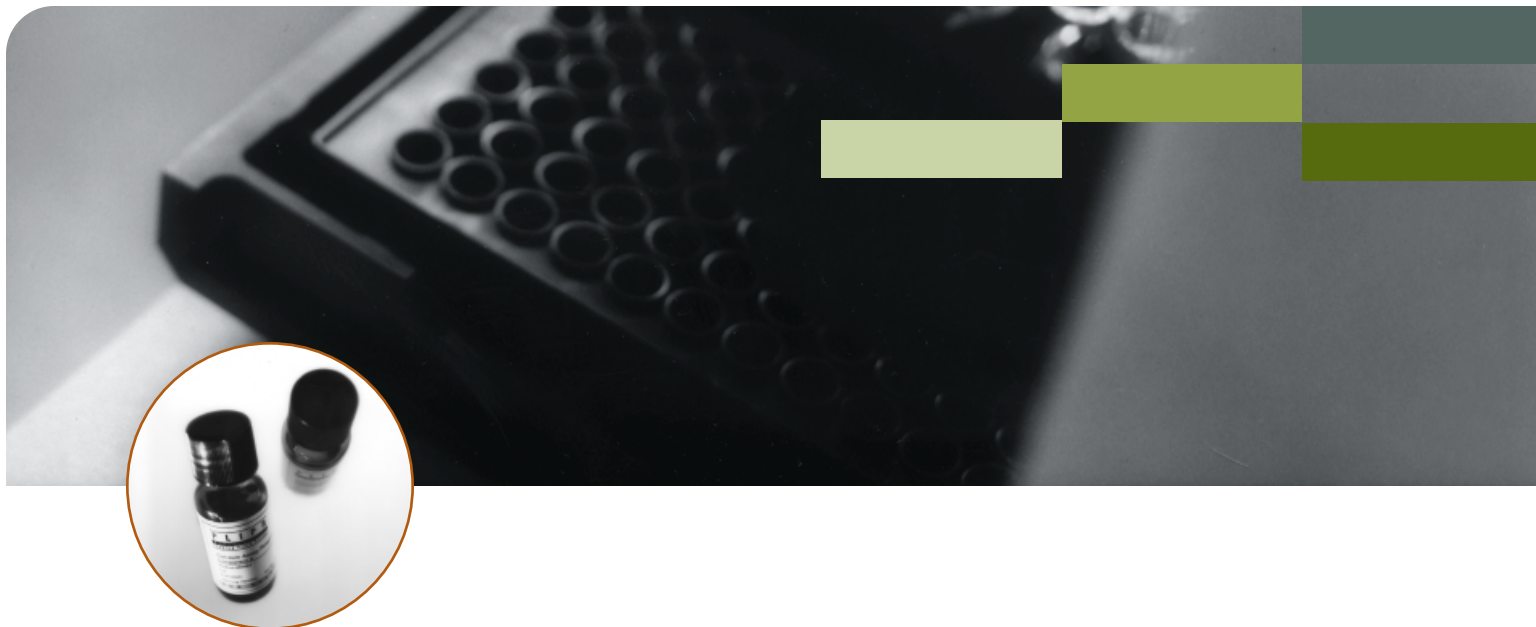


FLIPR[®] calcium assay kit

ENABLING HIGH-THROUGHPUT, LOW-COST ASSAYS



→ NO WASH STEPS

→ IMPROVED DATA

→ HIGHER THROUGHPUT

→ LOW COST

Every major pharmaceutical company uses the Molecular Devices FLIPR fluorometric imaging plate reader system in its drug discovery process. The FLIPR Calcium Assay Kit from Molecular Devices provides the easiest way to get the best performance from your FLIPR system.

OPTIMIZED NO-WASH ASSAY

The FLIPR Calcium Assay Kit was developed and optimized for the FLIPR system to provide a fast, simple and reliable fluorescence-based assay for detecting changes in intracellular calcium. With this kit, calcium assays on FLIPR become a Mix-and-Read procedure in which cells are incubated with the kit reagents for up to one hour and transferred directly to the FLIPR system for evaluation. There are no intermediate wash steps involved.

IMPROVED PHYSIOLOGICAL DATA

The major benefit of the optimized assay is apparent in the quality of the data. The signal obtained with the FLIPR Calcium Assay Kit tends to be higher than that observed in cells loaded with fluo-3 and, at a minimum, comparable to that seen with fluo-4 dye-loaded cells. Furthermore, tighter CVs across 96- and 384-well plates are observed, leading to better results. Figures 1 and 2 show typical data using the FLIPR Calcium Assay Kit.

HIGHER THROUGHPUT, LOWER COST

One advantage in any high throughput screening campaign is the reduced number of steps in the assay, which leads to even higher throughput when used with the FLIPR system. The kit's simple procedure involves the direct addition of



no wash



labor saving



time saving



better results

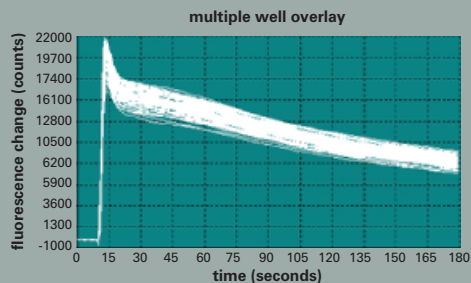


cost saving



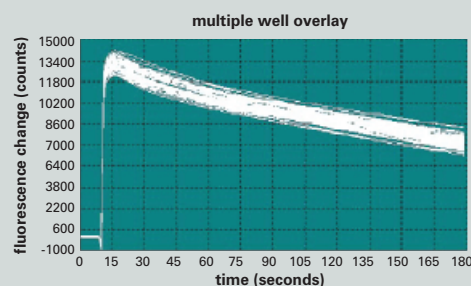
higher signal-to-noise ratio

calcium assay on FLIPR (figure 1)



G-protein coupled response of parental HEK293 cells evaluated on a FLIPR system using the FLIPR Calcium Assay Kit. Cells were loaded with kit reagents and immediately transferred to FLIPR and exposed to 10 μ M carbachol. No washing of the cells occurred.

calcium assay on FLIPR (figure 2)



Response of CHO cells transfected with M1-muscarinic receptors to 10 μ M of carbachol as measured on a FLIPR system using the FLIPR Calcium Assay Kit. No wash steps were involved in the protocol.

calcium assay throughput (figure 3)

standard calcium assay



FLIPR calcium assay kit



The FLIPR Calcium Assay Kit reduces assay time for twenty plates from 4 hours and 40 minutes to 2 hours and 45 minutes.

the kit reagents to the cell plate, incubation for 20 minutes to one hour, and then direct transfer of the plates to the FLIPR system for data collection. (See Figure 3.) The elimination of intermediate steps reduces valuable assay time and costs. Also, due to the improved kit chemistry, clear plates may be used instead of black-walled plates* to reduce disposable costs significantly.

CONVENIENT PROTOCOL

Another advantage in a high throughput screening campaign is increased convenience. Once dye-loaded with the kit reagents, cells are typically stable for several hours, maximizing assay flexibility. In addition, the FLIPR Calcium Assay Kit has been demonstrated to work equally well with both adherent and non-adherent cells. In many cases, poly-D-lysine coated plates are not required, further lowering the overall assay cost. With the FLIPR Calcium Assay Kit, weakly adherent and non-adherent cells are less likely to lift off the plate, and they display greater responsiveness due in part to the elimination of multiple wash/centrifugation steps. Users consistently see equivalent and, in many cases, superior responses to those obtained using the conventional wash protocol.

For assay development on FLIPR or FlexStation™.

ORDERING INFORMATION

FLIPR Calcium Assay Kit (Bulk):

Part Number: R8033

- (10) reagent vials
- (1) buffer bottle
- Provides sufficient reagent for 100 plates (96- or 384-well)

Volume discounts given for quantities of 5, 10, and 50 unit orders.

FLIPR Calcium Assay Kit (Explorer):

Part Number: R8041

- (10) reagent vials
- (1) buffer bottle
- Provides sufficient reagent for 10 plates (96- or 384-well)

SALES OFFICES

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- Germany +49-89-9605-880
- Japan +81-3-5282-5261

Check our web site for a current listing of our worldwide distributors.

www.moleculardevices.com

* Contact your Molecular Devices representative for more information.

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Specifications subject to change without notice.

