GFP-CERTIFIED® FLUOFORTE® Calcium assay kit

A brighter, more robust and GFP-compatible (orange dye) fluorescent assay for calcium mobilization

Enzo Life Sciences' GFP-CERTIFIED® FLUOFORTE® Calcium Assay Kit (high-throughput) provides a homogeneous fluorescence-based assay for detecting intracellular calcium mobilization across a broad spectrum of biological targets. Relative to other commercially available dyes, the GFP-CERTIFIED® FLUOFORTE® dye is the brightest and most sensitive fluorescent calcium indicator. The kit provides a homogeneous mix-and-read, no-wash calcium mobilization assay. The homogenous cell-based assay for calcium offers fewer steps, lower variability and an easier protocol for adherent and non-adherent cell lines. In addition, it requires neither a washing step, nor exogenous addition of a quencher dye, which could adversely effect receptor-ligand interaction kinetics.

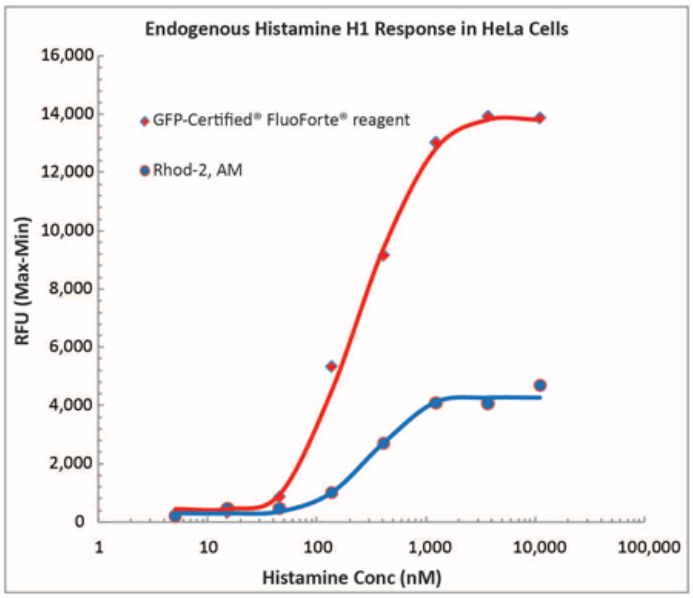
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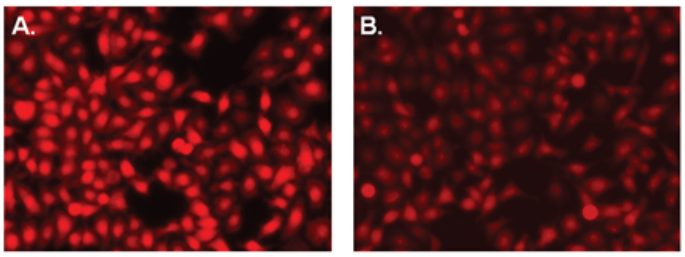
ENZ-510200	10x96 wells

Manuals, SDS & CofA View Online »

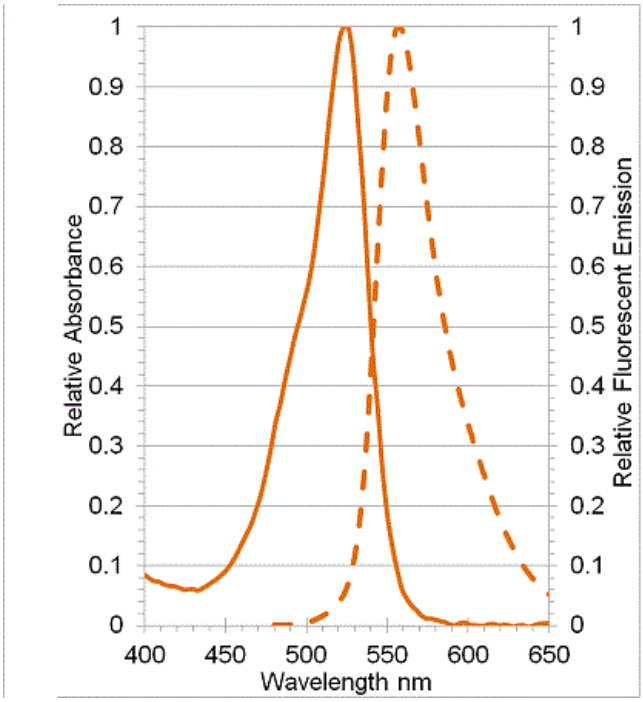
- Monitor calcium mobilization in GFP-expressing cell lines
- The brightest and most sensitive red-shifted fluorescent Ca^{2+} indicator
- Provides comparable EC50 and IC50 values as obtained using Rhod-4 AM and Fluo-4 AM
- Larger assay window and higher Z' factor values, allowing measurements of challenging cell lines and receptors



Histamine H1 receptors: HeLa cells were seeded overnight at 40,000 cells per 100 µL per well in a 96-well black wall/clear bottom microplate. The cells were incubated with 100 µL of GFP-CERTIFIED® FLUOFORTE® reagent or Rhod-2 AM dye for 1 hour at 37°C. Histamine (20µL/well) was added using a BioTek two-syringe pump dispenser to achieve the final indicated concentrations. No significant difference in EC50 of Histamine for GFP-CERTIFIED® FLUOFORTE® and Rhod2-AM dye was observed. GFP-CERTIFIED® FLUOFORTE® reagent generated higher intensity signal and a larger assay window.



U-2 OS cells were incubated with (A) GFP-CERTIFIED® FLUOFORTE® AM dye or (B) Rhod-2 AM dye. Cells were washed and treated with a final concentration of 100nM ATP and imaged immediately. GFP-CERTIFIED® FLUOFORTE® AM dye exhibits brighter fluorescence intensity than Rhod-2 AM.



Handling & Storage

Handling	Protect from light. Avoid freeze/thaw cycles.
Short Term Storage	-20°C
Long Term Storage	-80°C
Shipping	Dry Ice

Regulatory Status

RUO - Research Use Only

Product Details

Application	Flow Cytometry, Fluorescence microscopy, Fluorescent detection, HTS
Application Notes	The GFP-CERTIFIED® FLUOFORTE® Calcium Assay kit provides a homogeneous fluorescence-based assay for detecting intracellular calcium mobilization across a broad spectrum of biological targets.
Contents	**Starter pack** (Prod. No. ENZ-51020-KP010): **Reagent A** (lyophilized GFP-CERTIFIED® FLUOFORTE® dye), 1 vial **Reagent B** (dye efflux inhibitor), 10ml **Reagent C** (Hanks' buffer with 20mM HEPES, 100ml) Sufficient for 10 x 96-well plates **High-throughput** (Prod. No. ENZ-51020-KP100): **Reagent A** (lyophilized GFP-CERTIFIED® FLUOFORTE® dye), 10 vials **Reagent B** (dye efflux inhibitor), 10 x 10ml Sufficient for 100 x 96-well plates
Quality Control	% purity of Reagent A (GFP-CERTIFIED® FLUOFORTE® dye) by HPLC is ≥95%.
Quantity	ENZ-51020-KP010: for 10 x 96-well plates ENZ-51020-KP100: for 100 x 96-well plates

Technical Info / Product Notes

The GFP-CERTIFIED® FLUOFORTE® Calcium assay kit is a member of the CELLESTIAL® product line, reagents and assay kits comprising fluorescent molecular probes that have been extensively benchmarked for live cell analysis applications. CELLESTIAL® reagents and kits are optimal for use in demanding cell analysis applications involving confocal microscopy, flow cytometry, microplate readers and HCS/HTS, where consistency and reproducibility are required.

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