

## Calcium Quantification Assay Kit (Luminometric)

Cat. No. Kit-0142    Lot. No. (See product label)

### SPECIFICATION

#### Product Overview

Calcium flux assays are preferred methods in drug discovery for screening G protein coupled receptors (GPCR). This kit uses a highly calcium-sensitive and membrane-permeable coelenterazine analog as a calcium indicator for the cells that are transfected with apoaequorin gene. Aequorin is a calcium-sensitive bioluminescent protein from the jellyfish *Aequorea victoria* that has been used extensively as a calcium indicator in cells. The aequorin complex emits blue light when bound to calcium ions. The luminescence intensity is directly proportional to the  $\text{Ca}^{2+}$  concentration. This kit is much more sensitive than the fluorescence-based calcium assays. This kit provides an optimized assay method for monitoring the G-protein-coupled receptors and calcium channels. The assay can be performed in a convenient 96-well or 384-well microtiter-plate format and easily adapted to automation. It might be useful for monitoring the intracellular calcium mobilization in a specified compartment given that recombinant apoaequorin proteins can now be targeted to specific organelles, cells and tissues. This kit is more sensitive than the fluorescent calcium assays.

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|------|---------------|
| Size | 10 x 96 tests |
|------|---------------|

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| Description | This product should be stored desiccated. |
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| Applications | Functional Studies more details |
|--------------|---------------------------------|

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| Storage | Store at -20°C. |
|---------|-----------------|

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**Kit Components**

Components: 10 x 96 tests; 100% ETOH: 1 x 500 $\mu$ l Assay Buffer: 1 x 100ml;  
Coelenterazine Analog: 1 vial

**Compatible Sample  
Types**

Adherent cells, Suspension cells

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