

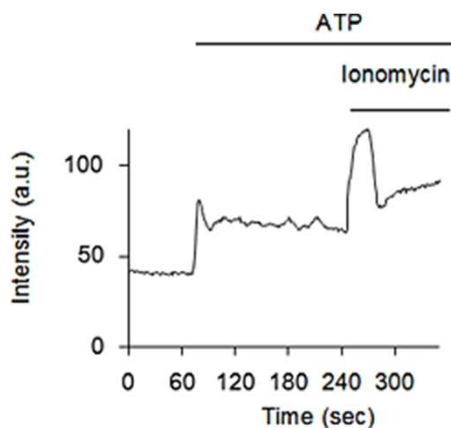
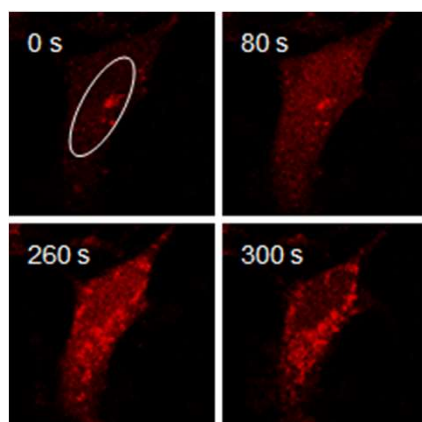
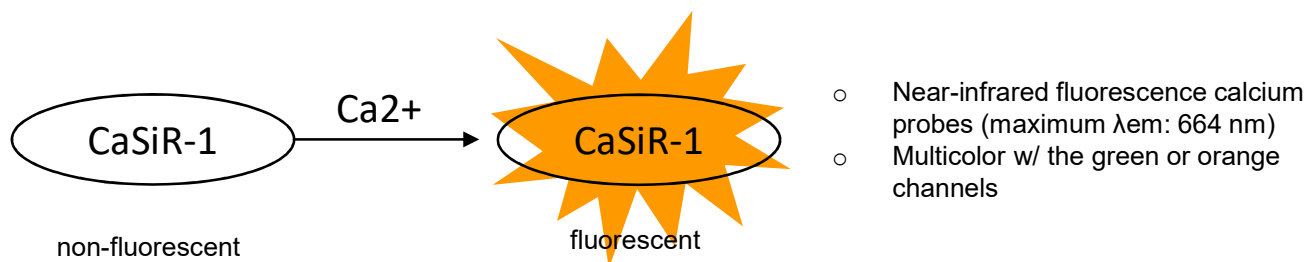
# CaSiR-1™ AM Assay Kit

Code no.	Product	Contents	Storage	Stability
GC404	<b>CaSiR-1™ AM Assay Kit</b>	<ul style="list-style-type: none"> <li>• CaSiR-1 AM × 5</li> <li>• Dimethylsulfoxide (DMSO) 1 mL × 1</li> <li>• 20% Pluronic® F-127 1 mL × 1</li> <li>• 20% Cremophor® EL 1 mL × 1</li> <li>• 500 mM Probenecid 1 mL × 1</li> <li>• 10 × Assay Buffer 15 mL × 1</li> </ul>	Store < -20°C, desiccate and protect from light. Storing the DMSO/dye solution is not recommended.	1 year (unopened)

The calcium ion is an critical intracellular second messenger and is involved in many of biological phenomena. Fluorescence imaging has contributed immensely to analysis of calcium behavior. The fluorescence wavelength region for most calcium probes are limited to around 500 -580 nm.

**CaSiR-1™** and **CaSiR-1™ AM** are near-infrared fluorescence calcium probes which have an emission wavelength at 664 nm. CaSiR-1™ changes fluorescent intensity greatly when bound to calcium. For example, fluorescent intensity rises more than 1000 fold when calcium concentration is changed from 0 μm to 39 μm. When the calcium concentration is 0 μm, little to no fluorescence is observed.

The CaSiR-1 AM assay kit is a ready-to-use screening set of CaSiR-1 AM for cell assays in 96 well plates. The kit contains detergent (Pluronic®F-127, Cremophor® EL) and anion transporter inhibitor (Probenecid), so you can prepare concentrations curves for calibration.



### Live cell imaging using HeLa cells

CaSiR-1™ was loaded to HeLa cell and stimulated by ATP and ionomycin.