

# Corning® Calcein AM Fluorescent Dye

Catalog No. 354217

## ***Guidelines for Use***

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## INTENDED USE

Calcein acetoxymethylester (Calcein AM) is a non-fluorescent, cell permeant compound that is hydrolyzed by intracellular esterases into the fluorescent anion calcein.

Corning® Calcein AM Fluorescent Dye can be used to fluorescently label viable cells for a variety of assays such as tumor cell invasion, endothelial cell migration, and endothelial cell tubulogenesis.

## MATERIAL PROVIDED

Corning Calcein AM Fluorescent Dye, 1 mg/vial

## RELATED PRODUCTS (not supplied)

Corning FluoroBlok™ Cell Culture Inserts  
Corning FluoroBlok 24- and 96-Multiwell Insert Systems  
Corning BioCoat™ Angiogenesis Systems  
Corning BioCoat Tumor Invasion Systems

For information about available products, go to our website at:  
[www.corning.com/lifesciences](http://www.corning.com/lifesciences)

## GENERAL USE

Allow the vial to equilibrate to room temperature, then reconstitute to desired concentration using high grade, anhydrous DMSO. The reconstituted stock can be used or stored in aliquots at -20°C. To avoid decomposition of the dye, maintain frozen stock solutions under desiccation. Avoid repeated freeze-thaw cycles.

Corning Calcein AM is most frequently used at a working concentration of 1-10 µM at loading times normally between 15 minutes to 1 hour. Loading times up to 4 hours may be required depending on cell type.

## RECOMMENDATIONS FOR USING CORNING® CALCEIN AM FLUORESCENT DYE WITH CORNING BIOCOAT™ FLUOROBLOK™ MULTIWELL INSERT SYSTEMS

Corning BioCoat FluoroBlok Multiwell Insert Systems contain a fluorescence blocking polyethylene terephthalate (PET) membrane that blocks >99% of the excitation and emission wavelengths of fluorophores commonly used to label cells.

For pre-labeling cells (e.g., for cell migration or cell invasion assays):

Label cells *in situ* using 1  $\mu$ M Calcein AM in HBSS/0.1% BSA for 60 minutes at 37°C. Wash cells with saline solution and resuspend in assay buffer.

For post-labeling cells (e.g., for cell migration or cell invasion assays):

Remove chemoattractant medium. Label using 4  $\mu$ g/ml (~4  $\mu$ M) Corning Calcein AM Fluorescent Dye in buffer (e.g., DPBS or HBSS) or medium (phenol red free is recommended). Add 0.5 ml dye per well for 24-well and 0.2 ml dye per well for 96-well. Incubate for one hour at 37°C.

Measure fluorescence at 494/517 nm (Abs/Em).

Please note that these guidelines are not specific for every situation; more specific protocols can be obtained from the literature or determined empirically.

## STORAGE AND STABILITY

Stable when stored at -20°C, protected from light. Avoid multiple freeze-thaws. Do not store in frost-free freezer. **KEEP FROZEN.**

## TECHNICAL SERVICE

For technical assistance, contact Technical Support at:  
tel: 800.492.1110, fax: 978.442.2476; email: [CLSTechServ@corning.com](mailto:CLSTechServ@corning.com).

## CUSTOMER SERVICE

To place an order in the U.S., contact Customer Service at:  
tel: 800.492.1110, fax: 978.442.2476; email: [CLSCustServ@corning.com](mailto:CLSCustServ@corning.com).

Outside the U.S., contact your local distributor or visit:  
[www.Corning.com/lifesciences](http://www.Corning.com/lifesciences) to locate your nearest Corning office.

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