

BD™ Calcein AM Fluorescent Dye

Catalog No. 354217

Guidelines for Use

FOR RESEARCH USE ONLY.
NOT FOR CLINICAL, DIAGNOSTIC, or THERAPEUTIC PROCEDURES.
NOT FOR USE IN HUMANS.



INTENDED USE

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

BD™ 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

BD Calcein AM Fluorescent Dye, 1 mg/vial

RELATED PRODUCTS (not supplied)

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

For information about available products from BD Biosciences, go to our website at:
bdbiosciences.com/product_families/

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.

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 BD™ CALCEIN AM FLUORESCENT DYE WITH BD FALCON™ AND BD BioCoat™ FLUOROBLOK™ MULTIWELL INSERT SYSTEMS

BD Falcon and BD 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 µM 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 µg/ml (~4 µM) BD™ 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 for at least three months from date of shipment when stored at -20°C.

TECHNICAL SERVICE

For technical assistance, contact Technical Service at:

tel: 877.232.8995 or 978.901.7389; fax: 978.901.7491; e-mail: labware@bd.com

CUSTOMER SERVICE

To place an order in the U.S., contact Customer Service at:

tel: 877.232.8995 fax: 800.325.9637 or 858.812.8889

BD Calcein AM Fluorescent Dye is manufactured for BD by AnaSpec, Inc.
BD, BD Logo, and all other trademarks are the property of Becton, Dickinson and Company. ©2006 BD

For research use only. Not for clinical, diagnostic, or therapeutic procedures. Not for use in humans.