Calcein AM

Biotechnology Grade

Technical literature is available at: www.mesgenbio.com. E-mail MesGen Technical Services if you have questions on use of this system: tech@mesgenbio.com

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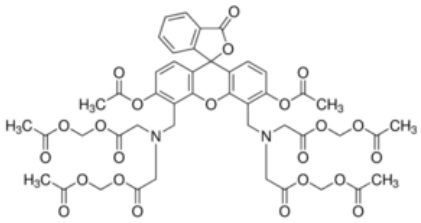
INNOVATION BIOTECHNOLOGY

Catalog Number : MG1998
CAS : 148504-34-1
Molecular weight : 994.86
Molecular formula : $C_{46}H_{46}N_2O_{23}$
Fluorescence : λ_{ex}496 nm; λ_{em}516 nm in 0.1 M Tris pH 8.0
Synonyms :



CAL-AM; 3',6'-Di(O-acetyl-2',7'-bis[N,N-bis(carboxymethyl)-aminomethyl]fluorescein tetraacetoxymethyl ester

Description

Calcein-AM is a hydrophobic non-fluorescent probe that can permeate the plasma membrane and can be hydrolyzed to Calcein, which is an extremely fluorescent and negatively charged molecule. The probe can be used to stain living cells and has been observed to fluoresce bright green in cytoplasmic Schwann cells. Calcein-AM has been reported to be a neutral substrate for Mdr (P-glycoprotein (Pgp) and multidrug resistance protein (MRP)) and has been used in flow cytometry studies to analyze the function of P-gp and MRP. Studies suggest that Calcein-AM can be used to detect MDR mediated resistance and to be transported by PGP from the plasma membrane. Mitochondrial permeability research has utilized Calcein as a cytosolic fluorophore. Has been used as a cytosolic fluorophore in mitochondrial permeability studies to image pore transition.

Storage condition

-20°C, protected from light.

For Research Use Only. Not For Use In Diagnostic Procedures.