**Calcein AM Biotechnology Grade**

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**Technical literature is available at:** [**www.mesgenbio.com**](http://www.mesgenbio.com)**. E-mail MesGen Technical Services if you have questions on use of this system: tech@mesgenbio.com**

**Catalog Number :** MG1998

# CAS : 148504-34-1

# Molecular weight : 994.86

**Molecular formula :** C46H46N2O23

**Fluorescence :**λex496 nm; λem516 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.**