

## **BCECF-AM**

Produkt 1004; Lot

CAS-Nr. 117464-70-7

Cell permeable ester of BCECF, the most widely used intracellular pH probe that is highly water soluble and becomes trapped within the cell after hydrolysis of the AM-esters. It is a mixture of three molecular species all of which are hydrolyzed by intracellular esterases into a single BCECF free acid form once they are in the cell.

## **Physical Data:**

Molecular Weight 808,69

Molecular Formula C<sub>39</sub>H<sub>36</sub>O<sub>19</sub>

Purity ≥ 95 % (method: HPCE)

Solubility DMSO, DMF Appearance White solid

Storage and Stability Store desiccated at -20 °C. Protect from light, especially when in solution.

Stock solution

Prepare stock solutions in high quality anhydrous DMSO at 1-10 mM. Stock solutions should be stable for at least 6 months if stored desiccated at -20°C. Dilute working solutions into aqueous media (physiological saline buffers such as Hanks buffered balanced salt solution) to  $1-10~\mu M$  final concentration of BCECF-AM. Incubate cells for 5-60 minutes and wash twice with fresh culture medium. Cell staining conditions differ by cell type, so it is necessary to optimize the conditions for each experiment. Use the minimum concentration of BCECF-AM in order to minimize accumulation of the by-products of AM ester hydrolysis (formaldehyde and acetic acid).

Determine the fluorescence intensity using a fluorescence microscope or a confocal laser microscope with an image analyzer. A typical BCECF calibration would use dual excitation ratio at 490 nm and 440 nm and fixed emission at 535 nm.

Caution

Potentially harmful. Avoid getting in eyes, on skin or on clothing. In case of eye or skin contact wash affected areas with plenty of water and seek medical advice.

