

Phalloidin lysine

Catalog number: 5304, 5305

Unit size: 100 ug, 1 mg

Product Details

Storage Conditions	Freeze (<-15 °C), Minimize light exposure
Expiration Date	12 months upon receiving

Chemical Properties

Appearance	Solid
Molecular Weight	885.91
Soluble In	DMSO

Applications

Phalloidin lysine is a convenient building block that can be used for developing a variety of phalloidin derivatives that may be for studying cellular structures and other biological applications. It readily reacts with amine-reactive dyes, biotins and other tag molecules (such as NHS esters, isothiocyanates and sulfonyl chlorides etc). Phalloidin, a bicyclic heptapeptide toxin, binds specifically at the interface between F-actin subunits, locking adjacent subunits together. Phalloidin binds to actin filaments much more tightly than to actin monomers, leading to a decrease in the rate constant for the dissociation of actin subunits from filament ends, essentially stabilizing actin filaments through the prevention of filament depolymerization. The property of phalloidin is a useful tool for investigating the distribution of F-actin in cells by labeling phalloidin with fluorescent analogs and using them to stain actin filaments for light microscopy. Fluorescent derivatives of phalloidin have turned out to be enormously useful in localizing actin filaments in living or fixed cells as well as for visualizing individual actin filaments in vitro. Fluorescent phalloidin derivatives have been used as an important tool in the study of actin networks at high resolution. AAT Bioquest offers a variety of fluorescent phalloidin derivatives with different colors for multicolor imaging applications.