

## 27-ALKYNE CHOLESTEROL

**SKU:** CCT-1410

## **Description**

This reagent is a modified lipid containing an omega-terminal alkyne. The terminal alkyne group can be used in a highly specific linking reaction with azide-containing reagents, known as 'click chemistry', in the presence of a copper-containing catalyst.

Alkyne cholesterol represents a versatile, sensitive, and easy-to-use tool for tracking cellular cholesterol metabolism and localization as it allows for manifold detection methods including mass spectrometry, and fluorescence microscopy.

27-Alkyne cholesterol is accepted by cellular enzymes from different biological species (Brevibacterium, yeast, rat, human) and these enzymes include cholesterol oxidases, hydroxylases, and acyl transferases that generate the expected metabolites in in vitro and in vivo assays. Using fluorescence microscopy, researchers can study the distribution of cholesterol at subcellular resolution, detecting the lipid in the Golgi and at the plasma membrane, but also in the endoplasmic reticulum and mitochondria.

In summary, alkyne cholesterol represents a versatile, sensitive, and easy-to-use tool for tracking cellular

cholesterol metabolism and localization as it allows for manifold detection methods including mass spectrometry, and fluorescence microscopy.

## **Specifications**

**Unit Size** 

1 mg, 5 mg, 25 mg

For research use only. Not intended for animal or human therapeutic or diagnostic use.





Molecular weight396.66Chemical compositionC28H44O

**CAS** 1527467-07-7

**Solubility** DMSO, DMF

Purity >95% (H NMR)

Appearance White crystalline

**Storage Conditions** -20°C.

**Shipping Conditions** Ambient temperature

For research use only. Not intended for animal or human therapeutic or diagnostic use.