

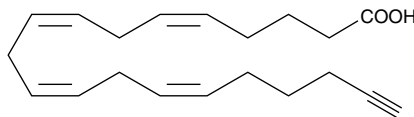
# Product Information



## Arachidonic Acid Alkyne

Item No. 10538

**CAS Registry No.:** 1219038-32-0  
**Formal Name:** 5Z,8Z,11Z,14Z-eicosatetraen-19-ynoic acid  
**Synonyms:**  $\omega$ -Alkynyl Arachidonic Acid, Click Tag™ Arachidonic Acid Alkyne  
**MF:**  $C_{20}H_{28}O_2$   
**FW:** 300.4  
**Purity:**  $\geq 90\%$   
**Stability:**  $\geq 2$  years at  $-20^\circ\text{C}$   
**Supplied as:** A solution in ethanol  
**UV/Vis.:**  $\lambda_{\text{max}}$ : 235 nm



### Laboratory Procedures

For long term storage, we suggest that arachidonic acid alkyne be stored as supplied at  $-20^\circ\text{C}$ . It should be stable for at least two years.

Arachidonic acid alkyne is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of arachidonic acid alkyne in these solvents is at least 100 mg/ml.

For greater aqueous solubility, arachidonic acid alkyne can be directly dissolved in 0.1 M  $\text{Na}_2\text{CO}_3$  (solubility of 1 mg/ml) and then diluted with PBS (pH 7.2) to achieve the desired concentration or pH. We do not recommend storing the aqueous solution for more than one day.

Arachidonic acid (Item No. 90010) is an essential fatty acid and a precursor for all prostaglandins, thromboxanes, and leukotrienes. Arachidonic Acid Alkyne is a form of arachidonic acid with an  $\omega$ -terminal alkyne. The terminal alkyne group can be used in click chemistry linking reactions to tag arachidonic acid with fluorescent or biotinylated labels for analysis of its metabolism and biological activity.<sup>1,2</sup> Because the alkyne group is at the  $\omega$ -terminus, this compound can be used to easily tag metabolites and derivatives.

### References

1. Kolb, H.C. and Sharpless, K.B. The growing impact of click chemistry on drug discovery. *Drug Discov. Today* **8**(24), 1128-1137 (2003).
2. Lutz, J.-F. and Zerafshani, Z. Efficient construction of therapeutics, bioconjugates, biomaterials and bioactive surfaces using azide-alkyne "click" chemistry. *Adv. Drug Deliv. Rev.* **60**, 958-970 (2008).

### Related Products

For a list of related products please visit: [www.caymanchem.com/catalog/10538](http://www.caymanchem.com/catalog/10538)

### Cayman Chemical

**Mailing address**  
1180 E. Ellsworth Road  
Ann Arbor, MI  
48108 USA

**Phone**  
(800) 364-9897  
(734) 971-3335

**Fax**  
(734) 971-3640

**E-Mail**  
[custserv@caymanchem.com](mailto:custserv@caymanchem.com)

**Web**  
[www.caymanchem.com](http://www.caymanchem.com)

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