SZABO SCANDIC

Part of Europa Biosite

Produktinformation

- Forschungsprodukte & Biochemikalien
- Zellkultur & Verbrauchsmaterial
- Diagnostik & molekulare Diagnostik
- Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!

Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

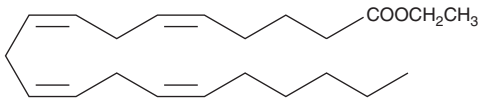
linkedin.com/company/szaboscandic

PRODUCT INFORMATION

Arachidonic Acid ethyl ester

Item No. 10008200

CAS Registry No.: 1808-26-0
Formal Name: 5Z,8Z,11Z,14Z-eicosatetraenoic acid, ethyl ester
Synonym: Ethyl Arachidonate
MF: $C_{22}H_{36}O_2$
FW: 332.5
Purity: ≥98%
Supplied as: A solution in ethanol
Storage: -20°C
Stability: ≥1 year



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Arachidonic acid ethyl ester 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 ethyl ester in these solvents is approximately 100 mg/ml.

Description

Arachidonic acid is the keystone essential fatty acid at the origin of the arachidonic acid cascade. It is converted by cyclooxygenase, lipoxygenase, and epoxygenase enzymes into more than one hundred fifty different potent primary autacoid metabolites in species ranging from fungi to plants to mammals. Arachidonic acid is stored in tissue phospholipids in esterified form, where it comprises a small but critically controlled percentage of the polyunsaturated fatty acid pool.[1] Arachidonic acid ethyl ester is a more lipophilic form of arachidonic acid that can be incorporated into dietary regimens or fed to cultured cells as a source of exogenous arachidonate. It is one of the fatty acid ethyl esters that increase cytosolic Ca^{2+} concentration leading to pancreatic acinar cell injury due to excessive consumption of ethanol.[2] Whereas arachidonic acid inhibits dopamine uptake, the ethyl esterified version does not retain this property.[3]

References

1. Holman, R.T. Control of polyunsaturated acids in tissue lipids. *J. Am. Coll. Nutr.* **5(2)**, 183-211 (1986).
2. Chen, N., Appell, M., Berfield, J.L., *et al.* Inhibition by arachidonic acid and other fatty acids of dopamine uptake at the human dopamine transporter. *Eur. J. Pharmacol.* **478(2-3)**, 89-95 (2003).
3. Criddle, D.N., Raraty, M.G.T., Neoptolemos, J.P., *et al.* Ethanol toxicity in pancreatic acinar cells: Mediation by nonoxidative fatty acid metabolites. *Proc. Natl. Acad. Sci. USA* **101(29)**, 10738-10743 (2004).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM