PRODUCT INFORMATION



13Z,16Z-Docosadienoic Acid

Item No. 20749

CAS Registry No.: Formal Name: Synonyms:	17735-98-7 13Z,16Z-docosadienoic acid <i>cis</i> -13,16-Docosadienoic Acid, FA 22:2
MF:	$C_{22}H_{40}O_2$
FW:	
Purity:	≥98%
Supplied as:	A solution in ethanol
Storage:	-20°C
Stability:	≥2 years
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.	

Laboratory Procedures

13Z,16Z-Docosadienoic acid 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 13Z,16Z-docosadienoic acid in these solvents is approximately 10 mg/ml.

13Z,16Z-Docosadienoic acid is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of 13Z,16Z-docosadienoic acid should be diluted with the aqueous buffer of choice. The solubility of 13Z,16Z-docosadienoic acid in PBS (pH 7.2) is approximately 0.5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

13Z,16Z-Docosadienoic acid is a natural ω -6 polyunsaturated fatty acid (PUFA). It is an agonist of free fatty acid receptor 4 (FFAR4, also known as GPR120) and strongly inhibits the secretion of ghrelin by isolated mouse gastric cells.¹ This 20:2 PUFA has been identified in mammals, fish, plants, and anaerobic fungi.²⁻⁶

References

- 1. Lu, X., Zhao, X., Feng, J., et al. Am. J. Physiol. Gastrointest. Liver Physiol. 303(3), G367-376 (2012).
- 2. de Oliveira, A.P., de Souza Franco, E., Barreto, R.R., et al. Evid. Based Complement. Altnernat. Med. e472382 (2013).
- 3. Gonzales, G.F., Gonzales, C., and Villegas, L. Toxicol. Mech. Methods 24(1), 60-69 (2014).
- 4. Kim, S.-W., Jhon, M., Kim, J.M., et al. PLoS One 11(3), e0151417 (2016).
- 5. Koppová, I., Novotná, Z., Štrosová, L., et al. Folia Microbiol. (Praha) 53(3), 217-220 (2008).
- 6. Wågbø, A.M., Canigalosi, M.V., Ciero, N., et al. Chem. Res. Toxicol. 25(6), 1253-1264 (2012).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFFTY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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