PRODUCT INFORMATION

13(Z)-Docosenoic Acid
Item No. 90175

CAS Registry No.: 112-86-7
Formal Name: 13Z-docosenoic acid
Synonyms: C22:1(13Z), C22:1 n-9, cis-13-Docosenoate, (Z)-Erucic Acid
MF: C22H42O2
FW: 338.6
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

13(Z)-Docosenoic 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 13(Z)-docosenoic acid in these solvents is approximately 100 mg/ml.

13(Z)-Docosenoic acid is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of 13(Z)-docosenoic acid should be diluted with the aqueous buffer of choice. The solubility of 13(Z)-docosenoic acid in PBS (pH 7.2) is approximately 0.1 mg/ml. The solubility of 13(Z)-docosenoic acid in 0.1 M Tris-HCl, pH 8 is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

13(Z)-Docosenoic acid is a 22-carbon monounsaturated fatty acid. 13(Z)-Docosenoic acid is found predominantly in rapeseed oil.1 13(Z)-Docosenoic acid is metabolized to oleic acid in vivo. Diets rich in 13(Z)-docosenoic acid were shown to cause heart lipidosis in experimental animals.2,3 The C-1 amide of docosenoic acid has been identified as one of the anandamide-related neurotransmitters associated with sleep.4

References