PRODUCT INFORMATION



4Z,7Z-Decadienoic Acid

Item No. 23516

CAS Registry No.: 169392-17-0

Formal Name: 4(Z),7(Z)-decadienoic acid

Synonym: FA 10:2 MF: $C_{10}H_{16}O_{2}$ FW: 168.2 **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

4(Z),7(Z)-Decadienoic 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 4(Z),7(Z)-decadienoic acid in these solvents is approximately 50 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. If an organic solvent-free solution of 4(Z),7(Z)-decadienoic acid is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of 4(Z), 7(Z)-decadienoic acid in PBS, pH 7.2, is approximately 0.1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

4(Z),7(Z)-Decadienoic acid is a polyunsaturated fatty acid (PUFA). It is increased in the plasma of patients with a medium-chain acyl-CoA dehydrogenase (MCAD) deficiency, a fatty acid oxidation disorder.

Reference

1. Onkenhout, W., Venizelos, V., van der Poel, P.F.H., et al. Identification and quantification of intermediates of unsaturated fatty acid metabolism in plasma of patients with fatty acid oxidation disorders. Clin. Chem. **41(10)**, 1467-1474 (1995).

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

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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