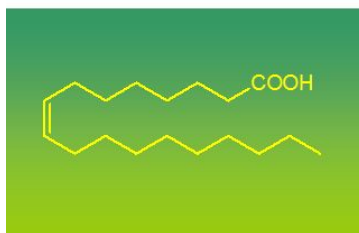


Lipid of the Month: August 2009

8(Z)-Octadecenoic acid



8(Z)-Octadecenoic acid is one of several isomers of oleic acid (9(Z)-octadecenoic acid) which arise during partial hydrogenation of fats. As such it is present in small amounts in human diets, and its incorporation into lipids and lipoproteins in human blood plasma has been studied (1). Low levels of 8(Z)-octadecenoic acid have been observed in human adipose tissue (2) and human hair (3). In the Plant Kingdom, small amounts of 8(Z)-octadecenoic acid have been detected in minor seed oils, in certain cases as a two-carbon elongation product of sapienic acid (6(Z)-hexadecenoic acid) (4). The compound finds use e.g. as a reference in analytical work and as a test compound in studies of the specificity of oleic acid-modifying enzymes.

8(Z)-Octadecenoic acid (A-1801-8) is prepared by Lipidox by total synthesis. Related compounds also available are 8-octadecynoic acid (A-1801-6), sapienic acid (6(Z)-hexadecenoic acid; A-1606), and sebaleic acid (5(Z),8(Z)-octadecadienoic acid; A-1858).

1. Emken, E.A. et al. (1989) *Lipids* 24, 61-69.
2. Jacob, J. and Grimmer, G. (1967) *J. Lipid Res.* 8, 308-311.
3. Weitkamp, A.W. et al. (1947) *J. Amer. Chem. Soc.* 69, 1936-1939.
4. Spencer, G.F. et al. (1971) *Lipids* 6, 712-714.