

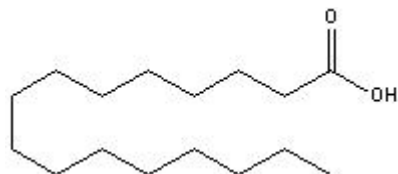
TECHNICAL INFORMATION

Catalog Number: 100905, 102553, 520871, 532226

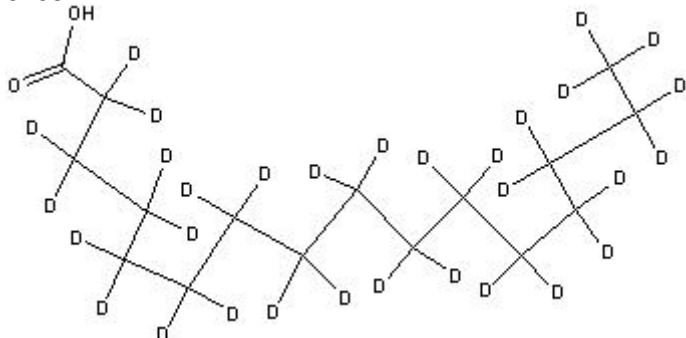
Palmitic Acid

Structure:

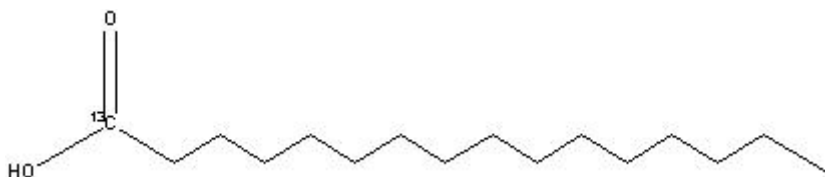
100905 and 102553



520871



532226



Molecular Formula (unlabeled): C₁₆H₃₂O₂

Molecular Weight (unlabeled): 256.4

CAS #: 57-10-3

Synonyms: Hexadecanoic Acid; Carboxylic acid C₁₆ ; Hexadecylic acid; Cetyllic acid

Physical Appearance: White to off white crystalline powder

Source: *Synthetic*

Solubility: Soluble in DMF (0.5% w/v - clear and colorless), hot alcohol, ether, propyl alcohol, chloroform (0.5 M - clear and colorless); insoluble in water.

Density: 0.853 g/ml¹

Description: A fatty acid. Occurs as the glyceryl ester in many oils and fats.¹

Availability:

Catalog Number	Description	Size
100905	Palmitic Acid, purity approximately 99%	10 g 25 g 100 g 250 g
102553	Palmitic Acid, Technical Grade, purity approximately 95%	100 g 500 g 1 kg
520871	Palmitic Acid - D31 CD ₃ (CD ₂) ₁₄ COOH Purity: ~98% D atom C ₁₆ D ₃₁ O ₂ H MW: 287.4	1 g
532226	Palmitic Acid - 1- ¹³ C CAS # 57677-53-9 CH ₃ (CH ₂) ₁₄ ¹³ COOH Purity: ~99% ¹³ C atom MW: 257.4	1 g 5 g 10 g

References:

- *Merck Index*, **12th Ed.**, No. 7128.
- Prabhakar, P., Cheng, V. and Michel, T., "A chimeric transmembrane domain directs endothelial nitric-oxide synthase palmitoylation and targeting to plasmalemmal caveolae." *J. Biol. Chem.*, **v. 275:25**, 19416-19421 (2000).
- Ahola, T., et al., "Effects of palmitoylation of replicase protein nsP1 on alphavirus infection." *J. Virol.*, **v. 74:15**, 6725-6733 (2000).
- Merchak, A., et al., "Use of stable isotope labeling technique and mass isotopomer distribution analysis of [(13)C] palmitate isolated from surfactant disaturated phospholipids to study surfactant in vivo kinetics in a premature infant." *J. Mass Spectrom.*, **v. 35:6**, 734-738 (2000).
- Veit, M., Becher, A., Ahnert-Hilger, G., "Synaptobrevin 2 is palmitoylated in synaptic vesicles prepared from adult, but not from embryonic brain." *Mol. Cell. Neurosci.*, **v. 15:4**, 408-416 (2000).
- Kong, J.Y. and Rabkin, S.W., "Palmitate-induced apoptosis in cardiomyocytes is mediated through alterations in mitochondria: prevention by cyclosporin A." *Biochim. Biophys. Acta*, **v. 1485:1**, 45-55 (2000).
- Bhattacharyya, R. and Wedegaertner, P.B., "Alpha 13 requires palmitoylation for plasma membrane localization, Rho-dependent signaling, and promotion of p115-RhoGEF membrane binding." *J. Biol. Chem.*, **v. 275:20**, 14992-14999 (2000).