# PRODUCT INFORMATION



## Myristic Acid-13C

Item No. 29463

CAS Registry No.: 57677-52-8

tetradecanoic-1-13C acid Formal Name:

C14:0-13C Synonym: MF: C<sub>13</sub>[13C]H<sub>28</sub>O<sub>2</sub>

FW: 229.4 **Purity:** ≥95%

Supplied as: A crystalline solid

Storage: -20°C Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### **Laboratory Procedures**

Myristic acid-13C is supplied as a crystalline solid. A stock solution may be made by dissolving the myristic acid-13C in the solvent of choice, which should be purged with an inert gas. Myristic acid-13C is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of myristic acid-13C in ethanol and DMF is approximately 15 mg/ml and approximately 12 mg/ml in DMSO.

## Description

Myristic acid-13C is intended for use as an internal standard for the quantification of myristic acid (Item No. 13351) by GC- or LC-MS. Myristic acid is a 14-carbon saturated fatty acid. It is incorporated into myristoyl coenzyme A (myristoyl-CoA) and transferred by N-myristoyltransferase to the N-terminal glycine of certain proteins either during translation to modify protein activity or post-translationally in apoptotic cells.1,2

### References

- 1. Bhatnagar, R.S., Fütterer, K., Waksman, G., et al. The structure of myristoyl-CoA: Protein N-myristoyltransferase. Biochim. Biophys. Acta 1441(2-3), 162-172 (1999).
- 2. Martin, D.D.O., Beauchamp, E., and Berthiaume, L.G. Post-translational myristoylation: Fat matters in cellular life and death. Biochimie 93(1), 18-31 (2011).

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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