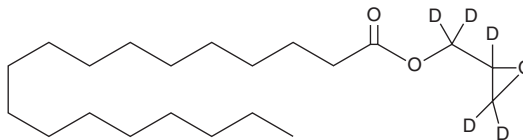


# PRODUCT INFORMATION



## Stearic Acid glycidyl ester-d<sub>5</sub> Item No. 36839

**CAS Registry No.:** 1346598-19-3  
**Formal Name:** (oxiran-2-yl-d<sub>3</sub>)methyl-d<sub>2</sub> stearate  
**Synonyms:** Glycidyl Octadecanoate-d<sub>5</sub>,  
Glycidyl Stearate-d<sub>5</sub>  
**MF:** C<sub>21</sub>H<sub>35</sub>D<sub>5</sub>O<sub>3</sub>  
**FW:** 345.6  
**Chemical Purity:** ≥98% (Stearic Acid glycidyl ester)  
**Deuterium**  
**Incorporation:** ≥99% deuterated forms (d<sub>1</sub>-d<sub>5</sub>); ≤1% d<sub>0</sub>  
**Supplied as:** A 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

Stearic acid glycidyl ester-d<sub>5</sub> is intended for use as an internal standard for the quantification of stearic acid glycidyl ester by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

Stearic acid glycidyl ester-d<sub>5</sub> is supplied as a solid. A stock solution may be made by dissolving the stearic acid glycidyl ester-d<sub>5</sub> in the solvent of choice, which should be purged with an inert gas. Stearic acid glycidyl ester-d<sub>5</sub> is soluble in organic solvents such as chloroform and methanol.

### Description

Stearic acid glycidyl ester is an esterized form of stearic acid (Item No. 10011298) containing a glycidyl group. It induces the formation of subcutaneous sarcomas and pulmonary tumors in mice when administered at a doses of 0.005-10 mg/animal and induces the formation of breast carcinomas at 0.1 mg/animal.<sup>1</sup> However, serum levels of stearic acid glycidyl ester are decreased in patients with prostate cancer compared to patients with benign prostatic hyperplasia and are negatively correlated with total cholesterol, LDL, and apolipoprotein B (ApoB) levels.<sup>2</sup>

### References

1. Swern, D., Wiedner, R., McDonough, M., *et al.* Investigation of fatty acids and derivatives for carcinogenic activity. *Cancer Res.* **30**(4), 1037-1046 (1970).
2. Xu, B., Chen, Y., Chen, X., *et al.* Metabolomics profiling discriminates prostate cancer from benign prostatic hyperplasia within the prostate-specific antigen gray zone. *Front. Oncol.* **11**, 730638 (2021).

#### WARNING

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

#### SAFETY DATA

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.

#### WARRANTY AND LIMITATION OF REMEDY

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