

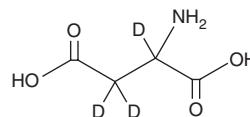
# PRODUCT INFORMATION



## DL-Aspartic Acid-d<sub>3</sub>

Item No. 34836

**CAS Registry No.:** 14341-75-4  
**Formal Name:** aspartic-2,3,3-d<sub>3</sub> acid  
**Synonym:** (±)-Aspartic Acid-d<sub>3</sub>  
**MF:** C<sub>4</sub>H<sub>4</sub>D<sub>3</sub>NO<sub>4</sub>  
**FW:** 136.1  
**Chemical Purity:** ≥95% (Aspartic Acid)  
**Deuterium Incorporation:** ≥99% deuterated forms (d<sub>1</sub>-d<sub>3</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

DL-Aspartic acid-d<sub>3</sub> is intended for use as an internal standard for the quantification of aspartic acid 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).

### Description

DL-Aspartic acid is a racemic mixture of the proteinogenic amino acid L-aspartic acid and the non-proteinogenic amino acid D-aspartic acid (Item No. 33494). It has been used as a precursor in the synthesis of amino acid derivatives with thrombolytic and lead chelating activities.<sup>1,2</sup>

### References

1. Gui, L., Zhao, M., Wang, Y., *et al.* Synthesis, nanofeatures, *in vitro* thrombus lysis activity and *in vivo* thrombolytic activity of poly- $\alpha,\beta$ -aspartyl-L-alanine. *Nanomedicine (Lond.)* **5(5)**, 703-714 (2010).
2. Zhang, H., Wang, Y., Zhao, M., *et al.* Synthesis and *in vivo* lead detoxification evaluation of poly- $\alpha,\beta$ -dl-aspartyl-l-methionine. *Chem. Res. Toxicol.* **25(2)**, 471-477 (2012).

#### 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.

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