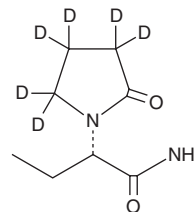


# PRODUCT INFORMATION



## Levetiracetam-d<sub>6</sub> Item No. 26457

**CAS Registry No.:** 1133229-30-7  
**Formal Name:** αS-α-ethyl-5-oxo-1-pyrrolidine-2,2,3,3,4,4-d<sub>6</sub>-acetamide  
**MF:** C<sub>8</sub>H<sub>8</sub>D<sub>6</sub>N<sub>2</sub>O<sub>2</sub>  
**FW:** 176.2  
**Chemical Purity:** ≥95% (Levetiracetam)  
**Deuterium Incorporation:** ≥99% deuterated forms (d<sub>1</sub>-d<sub>6</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

Levetiracetam-d<sub>6</sub> is intended for use as an internal standard for the quantification of levetiracetam (Item No. 9001820) 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).

Levetiracetam-d<sub>6</sub> is supplied as a solid. A stock solution may be made by dissolving the levetiracetam-d<sub>6</sub> in the solvent of choice, which should be purged with an inert gas. Levetiracetam-d<sub>6</sub> is slightly soluble in acetone (sonicated) and chloroform.

### Description

Levetiracetam is an antiepileptic agent that binds to the synaptic vesicle protein SV2A (IC<sub>50</sub> = 1.99 μM).<sup>1</sup> *In vivo*, levetiracetam suppresses seizures in fully kindled rats.<sup>2</sup>

### References

1. Lynch, B.A., Lamberg, N., Nocka, K., *et al.* The synaptic vesicle protein SV2A is the binding site for the antiepileptic drug levetiracetam. *Proc. Nat. Acad. Sci. USA* **101(26)**, 9861-9866 (2004).
2. Löscher, W. and Brandt, C. Prevention or modification of epileptogenesis after brain insults: Experimental approaches and translational research. *Pharmacol. Rev.* **62(4)**, 668-700 (2010).

#### 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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