

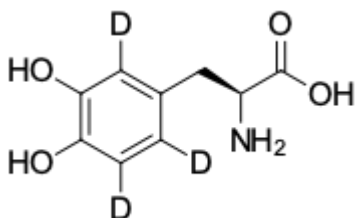
## L-DOPA-d3

<http://www.lumiprobe.com/p/l-dopa-d3>

L-DOPA-d3 is deuterated form of 3-(3,4-Dihydroxyphenyl)-L-alanine amino acid (L-DOPA). L-DOPA-d3 is intended for use as an internal standard for the quantification of L-DOPA in human plasma by LC-MS-MS.

L-3,4-Dihydroxyphenylalanine (L-DOPA) is a metabolic precursor of the neurotransmitter dopamine. In medicine, it is used as a replacement therapy for Parkinson's disease, compensating for the dopamine deficiency in the nigrostriatal system. In research, it serves as a marker for assessing the integrity and functional activity of dopaminergic neurons, particularly during PET imaging. Measurement of its plasma concentration is performed to monitor the drug's bioavailability and pharmacokinetics in patients, optimize dosing to manage dyskinesias, and diagnose aromatic L-amino acid decarboxylase (AADC) deficiency.

Using our product, you can accurately measure L-DOPA concentration in blood and use this data to tailor an optimal therapy.



**Structure of L-DOPA-d3**

---

### General properties

Appearance: beige solid

Molecular weight: 200.21

CAS number: 53587-29-4

Molecular formula: C<sub>9</sub>H<sub>8</sub>D<sub>3</sub>NO<sub>4</sub>

Quality control: NMR <sup>1</sup>H and HPLC-MS (95+ %, D: 98+ %)

Storage conditions: 24 months after receipt at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate.

Legal statement: This Product is offered and sold for research purposes only. It has not been tested for safety and efficacy in food, drug, medical device, cosmetic, commercial or any other use. Supply does not express or imply authorization to use for any other purpose, including, without limitation, in vitro diagnostic purposes, in the manufacture of food or pharmaceutical products, in medical devices or in cosmetic products.