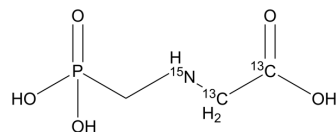


## Glyphosate-<sup>13</sup>C<sub>2</sub>, <sup>15</sup>N

<b>Cat. No.:</b>	HY-B0863S3
<b>CAS No.:</b>	1185107-63-4
<b>Molecular Formula:</b>	C <sup>13</sup> C <sub>2</sub> H <sub>8</sub> <sup>15</sup> NO <sub>3</sub> P
<b>Molecular Weight:</b>	172.05
<b>Target:</b>	Isotope-Labeled Compounds
<b>Pathway:</b>	Others
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Glyphosate- <sup>13</sup> C <sub>2</sub> , <sup>15</sup> N is the <sup>13</sup> C and <sup>15</sup> N labeled Glyphosate (HY-B0863). Glyphosate is an herbicidal derivative of the amino acid glycine. Glyphosate targets and blocks a plant metabolic pathway not found in animals, the shikimate pathway, required for the synthesis of aromatic amino acids in plants <sup>[1]</sup> .
<b>In Vitro</b>	Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs <sup>[2]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

[1]. Greim H, et al. Evaluation of carcinogenic potential of the herbicide glyphosate, drawing on tumor incidence data from fourteen chronic/carcinogenicity rodent studies. Crit Rev Toxicol. 2015;45(3):185-208.

[2]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019 Feb;53(2):211-216.

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA