MedChemExpress

## Product Data Sheet

DL-Mannitol-13C

| Cat. No.: | $\mathrm{HY}-\mathrm{N} 6618 \mathrm{~S}$ |
| :--- | :--- |
| CAS No.: | $132144-93-5$ |
| Molecular Formula: | $\mathrm{C}_{5}{ }^{13} \mathrm{CH}_{14} \mathrm{O}_{6}$ |
| Molecular Weight: | 183.16 |
| Target: | Isotope-Labeled Compounds |
| Pathway: | Others |
| Storage: | Please store the product under the recommended conditions in the Certificate of |
|  | Analysis. |



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## BIOLOGICAL ACTIVITY

| Description | DL-Mannitol- ${ }^{13} \mathrm{C}$ is the ${ }^{13} \mathrm{C}$-labeled DL-Mannitol. DL-Mannitol is obtained by combining D-mannitol with a sample of <br> Lmannitol obtained by reduction of L-mannono-1, Clactone[1]. |
| :--- | :--- |
| In Vitro | Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as <br> tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to <br> affect the pharmacokinetic and metabolic profiles of drugs ${ }^{[1]}$. <br> MCE has not independently confirmed the accuracy of these methods. They are for reference only. |

## REFERENCES

[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019;53(2):211-216.
[2]. Grindley, T. B., et al. Towards understanding 13C-N.M.R. chemical shifts of carbohydrates in the solid state. The spectra of d-mannitol polymorphs and of dl-mannitol. Carbohydrate Research, 197, 41-52

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