# MCE MedChemExpress

### D-Galactose-<sup>13</sup>C-5

Cat. No.: HY-N0210S4 CAS No.: 478518-62-6 Molecular Formula:  $C_5^{13}CH_{12}O_6$ 

Molecular Weight: 181.15

Target: Endogenous Metabolite; Isotope-Labeled Compounds

Pathway: Metabolic Enzyme/Protease; Others

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

## OH OH 13C OH OH OH H<sub>2</sub>

#### **BIOLOGICAL ACTIVITY**

Description	D-Galactose- <sup>13</sup> C-5 is the <sup>13</sup> C labeled D-Galactose. D-Galactose is a natural aldohexose and C-4 epimer of glucose[1][2][3][4].
In Vitro	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>[1]</sup> .  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 Feb;53(2):211-216.

[2]. Csiszovszki Z, et al. Structure and function of the D-galactose network in enterobacteria. MBio. 2011 Jun 28;2(4):e00053-11.;Cui X, et al. Chronic systemic D-galactose exposure induces memory loss, neurodegeneration, and oxidativedamage in mice: protectiv

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

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