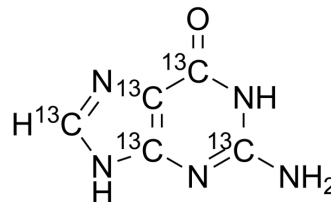


## Guanine-<sup>13</sup>C<sub>5</sub>

Cat. No.:	HY-Y1055S4
Molecular Formula:	<sup>13</sup> C <sub>5</sub> H <sub>5</sub> N <sub>5</sub> O
Molecular Weight:	156.09
Target:	Isotope-Labeled Compounds; DNA/RNA Synthesis; Endogenous Metabolite
Pathway:	Others; Cell Cycle/DNA Damage; Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Guanine- <sup>13</sup> C <sub>5</sub> is <sup>13</sup> C-labeled Guanine (HY-Y1055). Guanine (2-Aminohypoxanthine) is one of the fundamental components of nucleic acids (DNA and RNA). Guanine is a purine derivative, consisting of a fused pyrimidine-imidazole ring system with conjugated double bonds.
<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>[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.

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

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