Product Data Sheet

5-(2-Azidoethyl)cytidine

Cat. No.: HY-152789 Molecular Formula: $C_{11}H_{16}N_6O_5$ Molecular Weight: 312.28

Target: Nucleoside Antimetabolite/Analog

Pathway: Cell Cycle/DNA Damage

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

Analysis.

BIOLOGICAL ACTIVITY

Description 5-(2-Azidoethyl)cytidine is a cytidine nucleoside analog. Cytidine analogs have a mechanism of inhibiting DNA

methyltransferases (such as Zebularine, HY-13420), and have potential anti-metabolic and anti-tumor activities^[1]. 5-(2-Azidoethyl)cytidine is a click chemistry reagent, it contains an Azide group and can undergo copper-catalyzed azide-alkyne cycloaddition reaction (CuAAc) with molecules containing Alkyne groups. Strain-promoted alkyne-azide cycloaddition (SPAAC) can also occur with molecules containing DBCO or BCN groups.

REFERENCES

[1]. Gowher H, et al. Mechanism of inhibition of DNA methyltransferases by cytidine analogs in cancer therapy. Cancer Biol Ther. 2004 Nov;3(11):1062-8.

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