## **Product** Data Sheet

## **DHFR-IN-9**

 Cat. No.:
 HY-156123

 CAS No.:
 3032441-13-4

 Molecular Formula:
 C<sub>19</sub>H<sub>16</sub>N<sub>6</sub>S

 Molecular Weight:
 360.44

Target: Dihydrofolate reductase (DHFR); Bacterial Pathway: Metabolic Enzyme/Protease; Anti-infection

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

Analysis.

## **BIOLOGICAL ACTIVITY**

DHFR-IN-9 (compound 8A) is a dihydrofolate reductase (DHFR) inhibitor that affects purine and thymidylate biosynthesis in cell proliferation and growth. DHFR-IN-9 inhibits methicillin-resistant Staphylococcus aureus (MRSA) ATCC 43300 (IC $_{50}$ =0.25  $\mu$ g/mL) and has anti-infective effects in mouse models of systemic infection and thigh infection caused by it (dose: 2.5 mg/kg; ip). DHFR-IN-9 has stronger anticancer activity than paclitaxel (Y-B0015) in a mouse model of breast cancer (dose: 2.5 mg/kg; ip; once every 3 days)<sup>[1]</sup>.

IC<sub>50</sub> & Target IC50: 0.25 μg/mL (MRSA ATCC 43300)<sup>[1]</sup>

## **REFERENCES**

[1]. Zhu Z, et al. Exploration and Biological Evaluation of 1, 3-Diamino-7 H-pyrrol [3, 2-f] quinazoline Derivatives as Dihydrofolate Reductase Inhibitors[J]. Journal of Medicinal Chemistry, 2023...

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

Tel: 609-228-6898

Fax: 609-228-5909

 $\hbox{E-mail: } tech@MedChemExpress.com$ 

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