## **Product** Data Sheet

## **Trimethoprim 3-oxide**

Cat. No.: HY-100645 CAS No.: 27653-67-4 Molecular Formula:  $C_{14}H_{18}N_4O_4$ Molecular Weight: 306.32

Target: Drug Metabolite

Pathway: Metabolic Enzyme/Protease

Storage: Powder -20°C 3 years

 $\begin{array}{ccc} & 4^{\circ}\text{C} & 2 \text{ years} \\ \text{In solvent} & -80^{\circ}\text{C} & 6 \text{ months} \\ & -20^{\circ}\text{C} & 1 \text{ month} \end{array}$ 

## **BIOLOGICAL ACTIVITY**

 $\textbf{Description} \qquad \qquad \text{Trimethoprim 3-oxide (Trimethoprim 3-N-oxide) is the primary metabolite of trimethoprim} \\ \textbf{1}.$ 

In Vitro Trimethoprim 3-oxide is the primary metabolite of trimethoprim [1].

Trimethoprim 3-oxide (3-NO-TMP) is converted from trimethoprim by CYP1A1 and CYP1B1 with highest rates in human liver microsomes (HLMs). The CYP1A inhibitor  $\alpha$ -Naphthoflavone inhibits Trimethoprim 3-oxide formation, however, other competitive P450 inhibitors has no obvious inhibition on the formation [1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## **REFERENCES**

[1]. Goldman JL, et al. In Vitro Hepatic Oxidative Biotransformation of Trimethoprim. Drug Metab Dispos. 2015 Sep;43(9):1372-80.

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

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Inhibitors