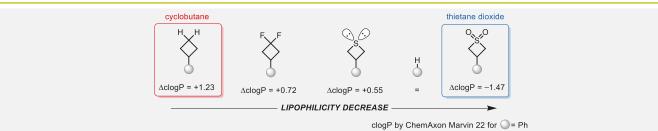
# **Thietane Dioxide**

#### Introduction

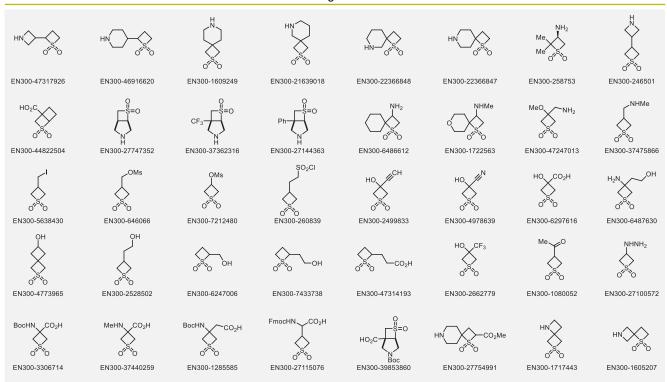
Thietane dioxide, the smallest cyclic sulfone, shares notable similarities with cyclobutane. 1,2 Compared to other four-membered ring structures, thietane dioxide reduces lipophilicity while only slightly increasing molecular volume. A recent study demonstrated that replacing a peptide bond with thietane dioxide led to significant improvements in both substance metabolic stability and target selectivity. Enamine offers a diverse range of thietane dioxides, including promising spirocycles, amino acids, and positional isomers.

$$C_{50} = 132 \text{ nM} \qquad EC_{50} = 17.4 \text{ nM} \qquad EC_{50$$

### Concept



#### We offer: over 100 thietane dioxides from stock on 5-10 gram scale.



## References

1. K. Francisco et al. Eur. J. Med. Chem. 2021, 218, 113399.

2. T. Ni et al. Eur. J. Med. Chem. 2024, 264, 116026.

3. H. Wang et al. *Bioorg. Chem.* **2023**, *138*, 106626.

