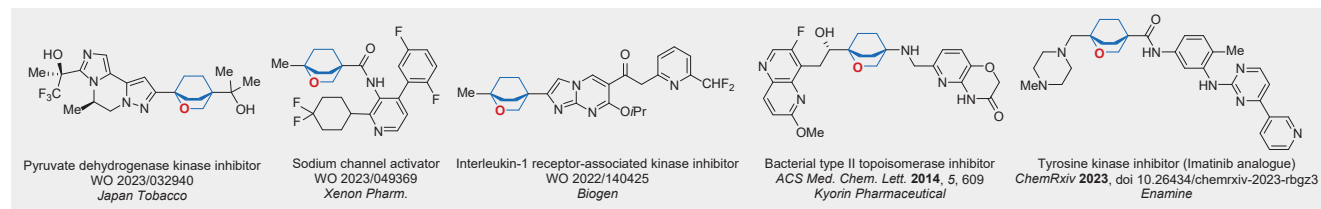


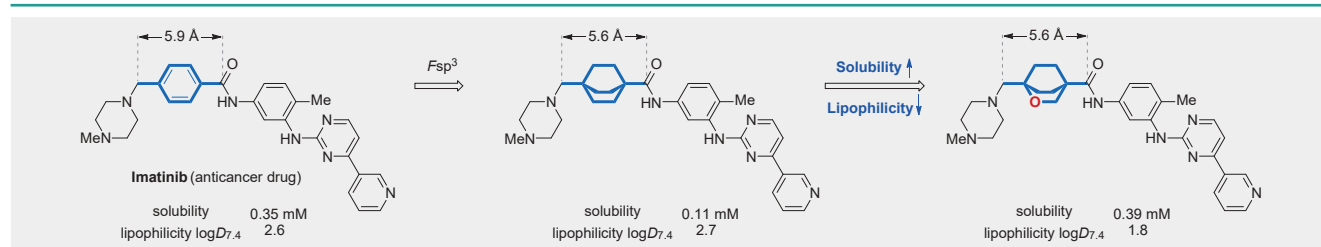
Ideal Bioisostere for *para*-Substituted Benzene

Introduction

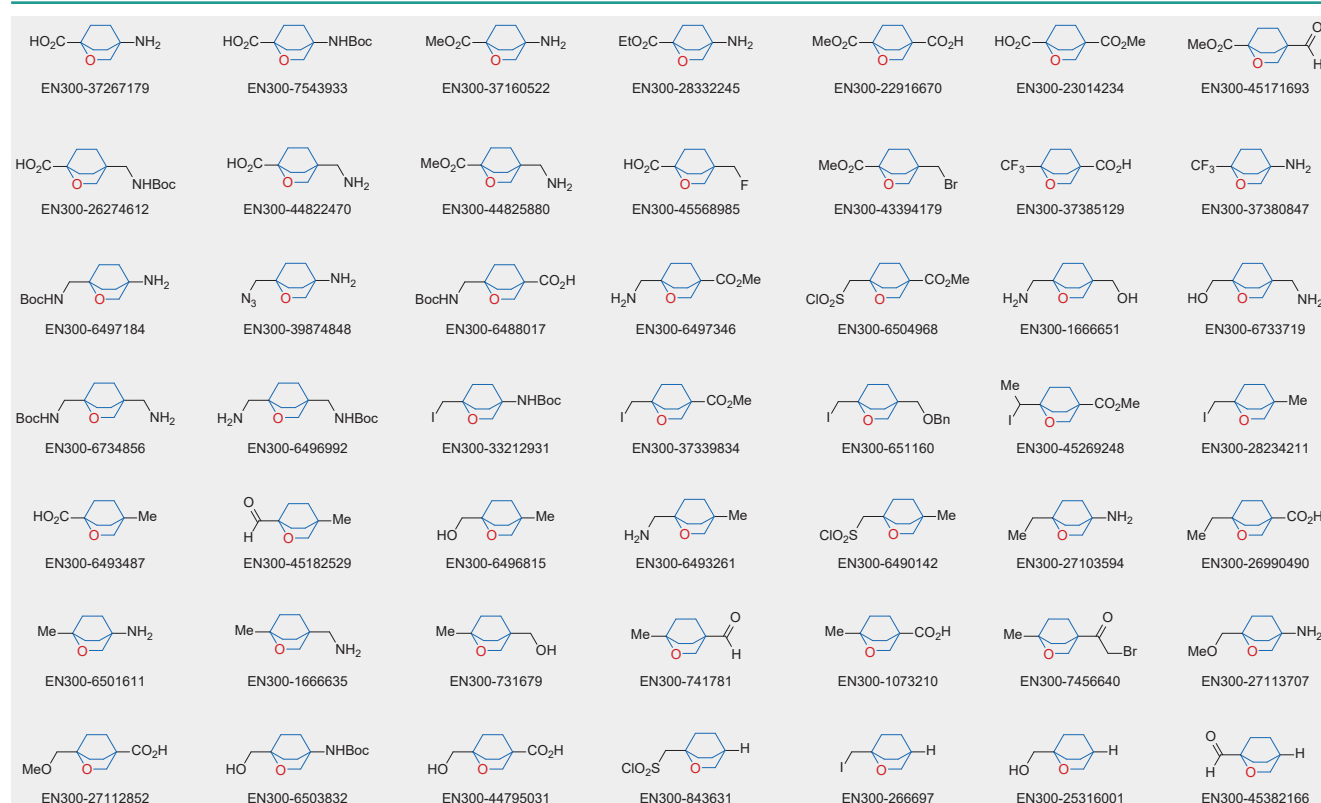
The phenyl ring is a basic structural element in chemistry. Here, we have designed, synthesized, and validated its new saturated bioisostere with improved physicochemical properties – 2-oxabicyclo[2.2.2]octane. The design of the structure was based on the analysis of the advantages and disadvantages of the previously used bioisosteres: bicyclo[1.1.1]pentane, bicyclo[2.2.2]octane, and cubane.¹⁻³ 2-Oxabicyclo[2.2.2]octane core was incorporated into the structure of drug Imatinib instead of the phenyl ring and led to improvement of physicochemical properties.⁴ Our chemists have synthesized a sizable collection of 2-oxabicyclo[2.2.2]octanes available exclusively from Enamine. Try our 2-oxabicyclo[2.2.2]octanes in your research!



New concept



We offer: 2-oxabicyclo[2.2.2]octanes from stock on 5-100 gram scale.



References

1. P. Mykhailiuk. *Org. Biomol. Chem.* **2019**, *17*, 2839.
2. M. Subbaiah et al. *J. Med. Chem.* **2021**, *64*, 14046.

3. A. Kolaric et al. *J. Med. Chem.* **2020**, *63*, 5664.
4. V. Levterov et al. *ChemRxiv* **2023**, doi: 10.26434/chemrxiv-2023-rbgz3



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