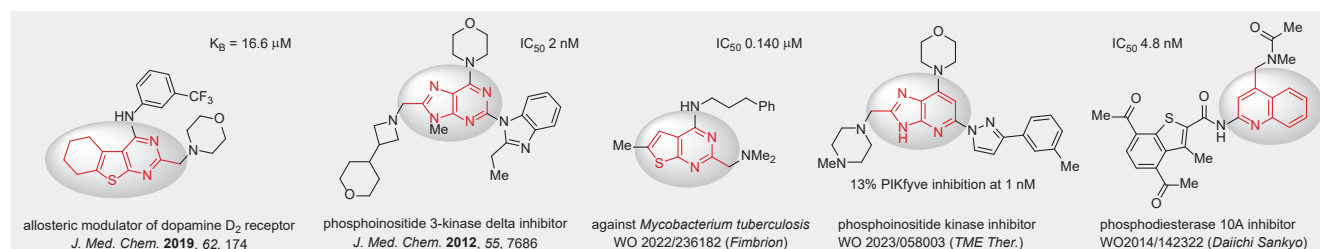


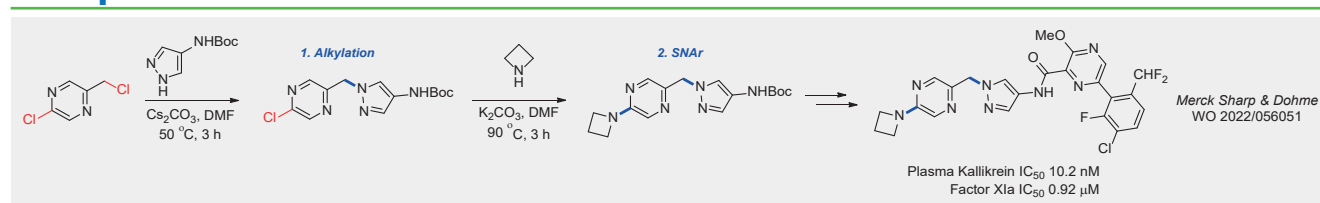
# Bifunctional Heterocyclic Scaffolds

## Introduction

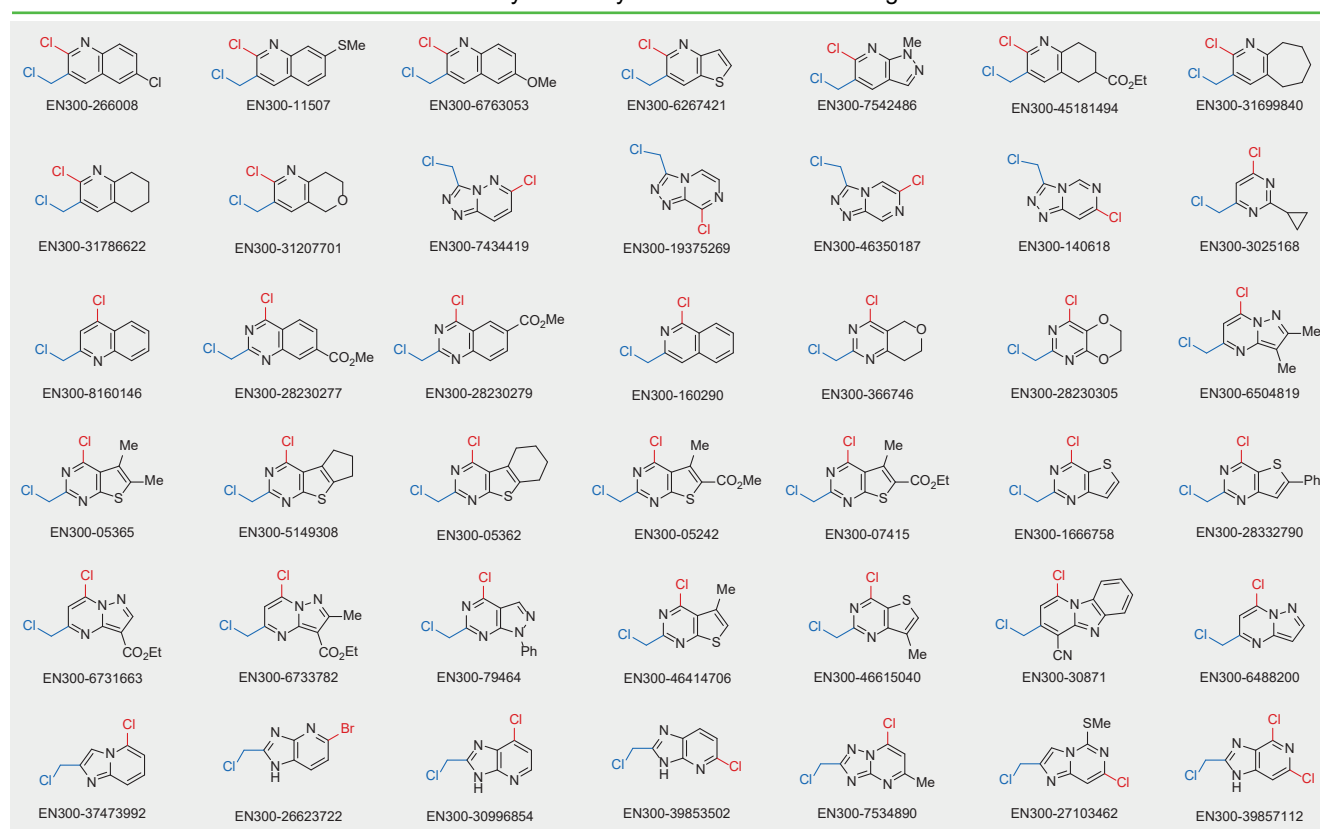
Bis-halogenated heterocycles have proven to be useful precursors for the selective synthesis of functionalized pharmaceutical molecules. Herein, we offer a library of building blocks with two chlorine atoms bearing different reactivity. The chloro-chloromethyl heterocyclic compounds are great starting materials amenable to two sequential aminations: the chloromethyl moiety reacts first *via* a traditional nucleophilic substitution, while the remaining active chlorine reacts afterwards in  $S_NAr$  substitution (uncatalyzed) or Buchwald–Hartwig amination (Pd-catalyzed).<sup>1-3</sup> Try our heterocyclic scaffolds in your research!



## Examples



**We offer:** more than 50 chloro-chloromethyl heterocycles from stock on 5-10 gram scale



## References

1. A. Bogolubsky *et al. J. Comb. Chem.* **2007**, 9, 661.  
2. J. Murray *et al. J. Med. Chem.* **2012**, 55, 7686.

3. T. Fyfe *et al. J. Med. Chem.* **2019**, 62, 174



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