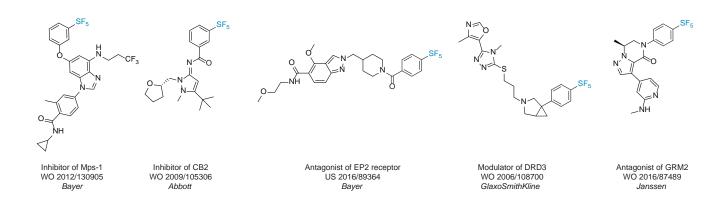
SF₅-BUILDING BLOCKS

The organic chemistry of the pentafluorosulfanyl group (SF₅) has been developing since 1950's. As the SF_5 group is larger and more lipophilic than the CF_3 one, it is often considered as a "super-trifluoromethyl group". Over the past decade, the SF5-containing aromatic compounds have found great practical application in medicinal chemistry.

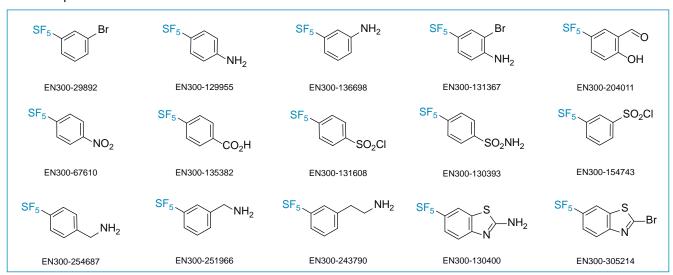


	NO ₂ CO ₂ H	SF ₅	CF ₃	SCF ₃ CO ₂ H	OCF ₃	F CO ₂ H
pKa EtOH/H ₂ O 4.60 50:50		4.82	5.11	5.15	5.16	5.28
Lipophilicity (π) of substituent X						
Х	SCF ₃	SF ₅	OCF ₃	CF ₃	F	Н
π_{p}	1.44	1.23	1.04	0.88	0.14	0

Properties

- One of the most electron-withdrawing
- high chemical and thermal stability
- high lipophilicity

Our offer: >30 SF₅-building blocks in gram amounts in stock. Custom synthesis of further analogues and compound libraries



References

¹ R. Paul et al. Chem. Rev. 2015, 1130, ² S. Altomonte et al. J. Fluor. Chem. 2012, 57.

³ P. Kirsch. Modern Fluoroorganic Chemistry. 2004, 146.

