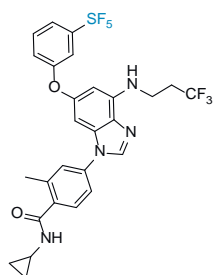
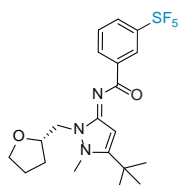


SF₅-BUILDING BLOCKS

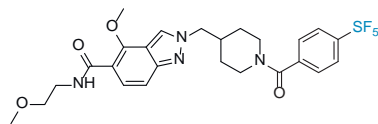
The organic chemistry of the pentafluorosulfanyl group (SF₅) has been developing since 1950's. As the SF₅ group is larger and more lipophilic than the CF₃ one, it is often considered as a "super-trifluoromethyl group". Over the past decade, the SF₅-containing aromatic compounds have found great practical application in medicinal chemistry.



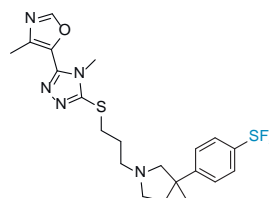
Inhibitor of Mps-1
WO 2012/130905
Bayer



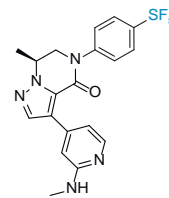
Inhibitor of CB2
WO 2009/105306
Abbott



Antagonist of EP2 receptor
US 2016/89364
Bayer



Modulator of DRD3
WO 2006/108700
GlaxoSmithKline



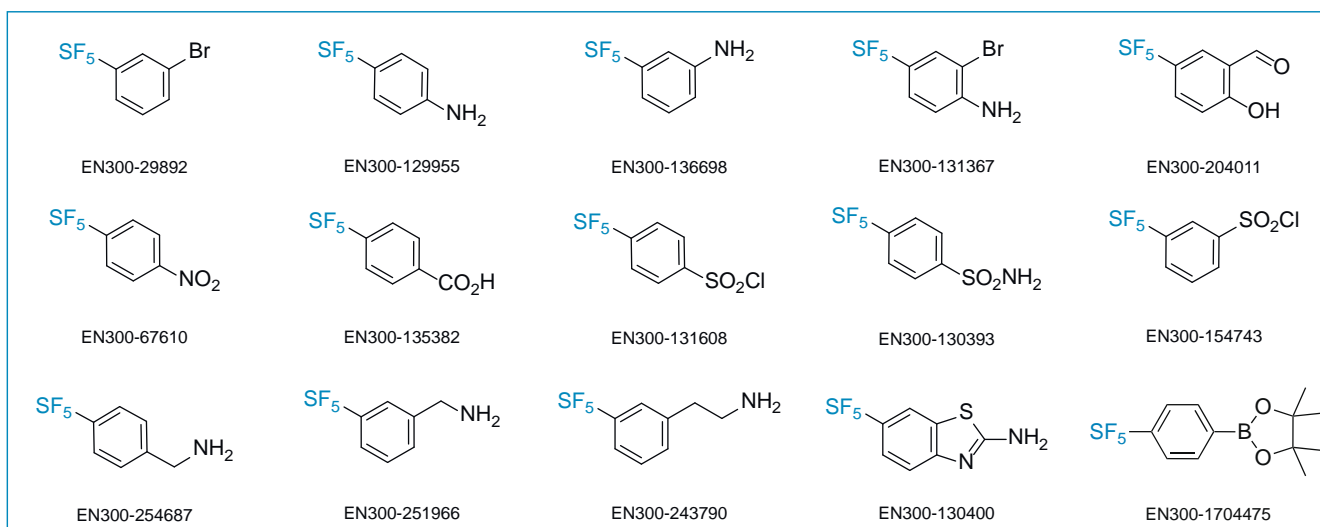
Antagonist of GRM2
WO 2016/87489
Janssen

pKa EtOH/H ₂ O 50:50	4.60	4.82	5.11	5.15	5.16	5.28
Lipophilicity (π) of substituent X						
X	SCF ₃	SF₅	OCF ₃	CF ₃	F	H
π _p	1.44	1.23	1.04	0.88	0.14	0

Properties

- One of the most electron-withdrawing groups
- 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.