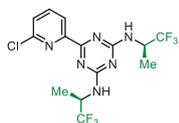


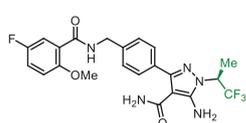
Trifluoroisopropyl Motif for Drug Design

Introduction

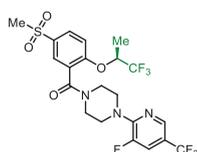
1,1,1-Trifluoroisopropyl is a fluoroalkyl moiety that has made a significant impact on recent drug discovery. Two drugs featuring this fragment, Vorasidenib and Pirtobrutinib, have recently received FDA approval, and at least ten others have advanced to various stages of clinical trials. This innovative fluoroalkyl group enhances potency,¹ improves CNS penetration,² and reduces metabolic clearance.^{3,4} Explore our collection of 1,1,1-trifluoroisopropyl compounds and their closest analogues, 1,1-difluoroisopropyl substances.



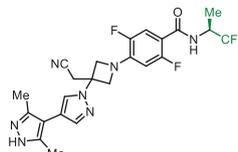
Vorasidenib (AG-881)
inhibitor of mutant isocitrate dehydrogenase 1/2
FDA approved 2024 against glioma
Agiros/Servier



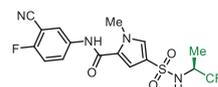
Pirtobrutinib (RXC-005, LOXO-305)
noncovalent inhibitor of Burton's tyrosine kinase
FDA approved 2023 treatment of lymphoma
Redx/Loxo/Eli Lilly



Bitopterin (RG-1678, RO-4917838)
inhibitor of glycine transporter 1
Phase 3 trials against Schizophrenia
Hoffmann-La Roche



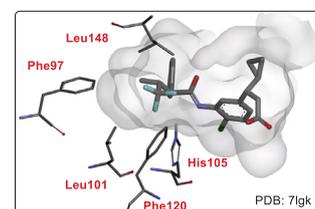
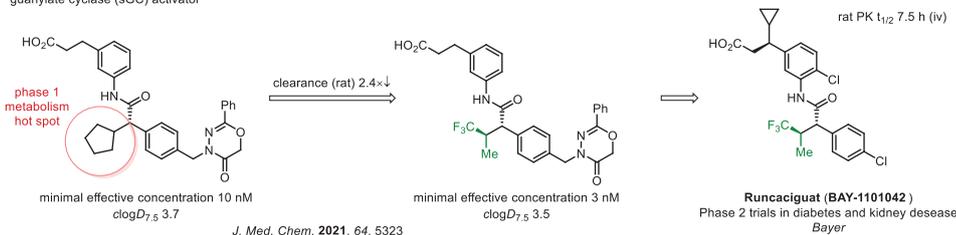
Povorcitinib (INCB54707)
inhibitor of Janus kinase 1
Phase 3 trials against autoimmune skin conditions
Incyte



Bersacapavir (JNJ-56136379)
disrupts viral capsid assembly
Phase 2 trials against hepatitis B
Janssen

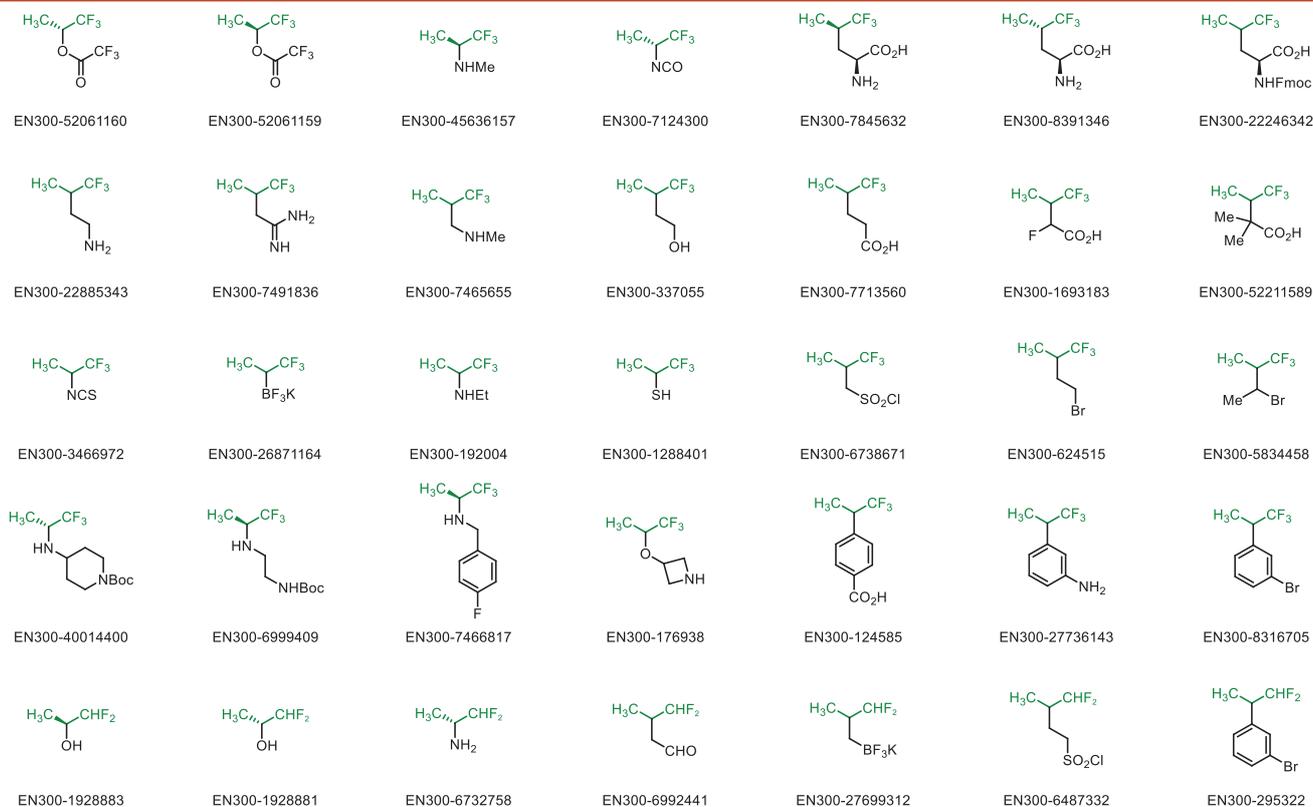
Case study

guanylate cyclase (sGC) activator



Nostoc sp. H-NOX domain protein with runcaciguat

We offer: over 100 1,1,1-trifluoroisopropyl and 1,1-difluoroisopropyl compounds from stock on 5-10 gram scale.



References

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- E. Pinard et al. *J. Med. Chem.* **2010**, *53*, 4603.

- M. Hahn et al. *J. Med. Chem.* **2021**, *64*, 5323.
- K. Xiao et al. *ACS Med. Chem. Lett.* **2025**, *16*, 454.



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