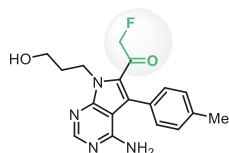


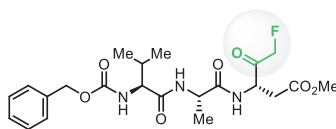
α -Fluoroketones for Drug Discovery

Introduction

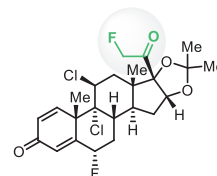
α -Fluoroketones, particularly α -fluoromethyl ketones (FMK), act as a robust and selective chemical handle for irreversible binding of bioactive molecules to cysteine residues in target proteins.¹ FMK molecules are present in various compound classes, including several commercial peptidic caspase inhibitors related to Z-VAD-FMK, halosteroid tralonide, and more.² Additionally, α -fluoroketones are frequently utilized in drug discovery projects as advanced ketone building blocks suitable for Claisen-Schmidt condensation and reductive amination, that produce fluorinated bioactive molecules with enhanced properties.^{3,4} Try our α -fluoroketones in our next project!



FMK
inhibitor of p90 ribosomal protein S6 kinase
Nat. Chem. Biol. **2007**, 3, 156



Z-VAD(OMe)-FMK
Caspase inhibitor
J. Exp. Med. **1996**, 184, 2445

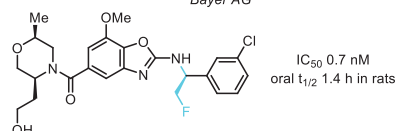
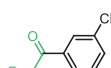


Tralonide
synthetic glucocorticoid corticosteroid
Syntex Corp

Reactions

Reductive amination

J. Med. Chem. **2020**, 63, 12574
anticoagulant

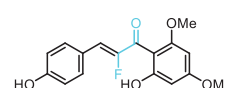
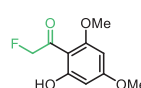


BAY1217224
orally available thrombin inhibitor
Bayer AG

IC₅₀ 0.7 nM
oral t_{1/2} 1.4 h in rats

Claisen-Schmidt condensation

Eur. J. Med. Chem. **2020**, 193, 112216
against chronic inflammation

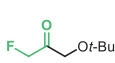


NO inhibition rate 70%
at 10 μ M pre-treatment in RAW 264.7 cells

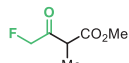
We offer: over 100 α -fluoroketones from stock on 5-10 gram scale.



EN300-171451



EN300-7462235



EN300-45185840



EN300-7443230



EN300-7443228



EN300-7252100



EN300-6739491



EN300-51663052



EN300-1654921



EN300-7411182



EN300-27146489



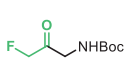
EN300-52401581



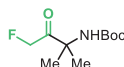
EN300-336024



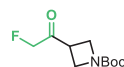
EN300-46456531



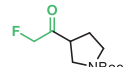
EN300-22997653



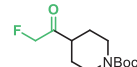
EN300-39878892



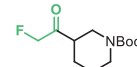
EN300-27695655



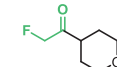
EN300-6498760



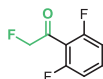
EN300-27685111



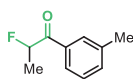
EN300-27745441



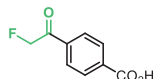
EN300-7439034



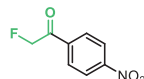
EN300-3735260



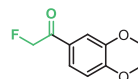
EN300-3731530



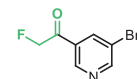
EN300-2008082



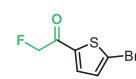
EN300-1620634



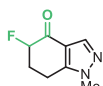
EN300-5801260



EN300-39847314



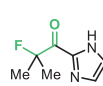
EN300-39847109



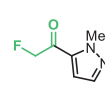
EN300-1692207



EN300-1716020



EN300-3935941



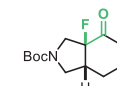
EN300-6056344



EN300-313611



EN300-51905717



EN300-51896974

References

1. M. Cohen et al. *Science* **2005**, 308, 1318.
2. S. Dhani et al. *Cell Death Dis.* **2021**, 12, 949.

3. A. Hillisch et al. *J. Med. Chem.* **2020**, 63, 12574.
4. Y. Yang et al. *Eur. J. Med. Chem.* **2020**, 193, 112216.



Search & Buy on-line at **EnamineStore.com**
Look for more at Chem-Space.com

BB@enamine.net, www.enamine.net

