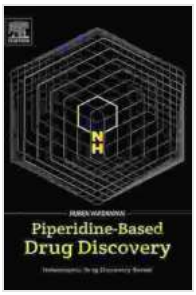
Piperidine Based Drug Discovery: A Key to Heterocyclic Drug Discovery



Piperidine-Based Drug Discovery (Heterocyclic Drug Discovery)

★★★★★ 5 out of 5

Language	: English
File size	: 15374 KB
Text-to-Speech	: Enabled
Screen Reader	: Supported
Enhanced typesetting	: Enabled
Print length	: 254 pages

Piperidine is a six-membered heterocyclic compound with the formula C5H11N. It is a colorless liquid with a strong, pungent odor. Piperidine is a versatile building block for the synthesis of more complex molecules, and it is found in a wide variety of natural products and pharmaceuticals.

Piperidine is a privileged scaffold in drug discovery due to its unique properties. It is a highly polar molecule, which makes it water-soluble. It is also a relatively small molecule, which makes it easy to penetrate cells. Piperidine is also a relatively stable molecule, which makes it resistant to degradation.

Piperidine has been used in the synthesis of a wide variety of drugs, including antibiotics, antivirals, and antifungals. It is also used in the synthesis of drugs for the treatment of cancer, diabetes, and cardiovascular disease.

One of the most important applications of piperidine in drug discovery is in the synthesis of heterocyclic compounds. Heterocyclic compounds are molecules that contain at least one ring that contains both carbon and nitrogen atoms. Heterocyclic compounds are found in a wide variety of natural products and pharmaceuticals, and they play an important role in many biological processes.

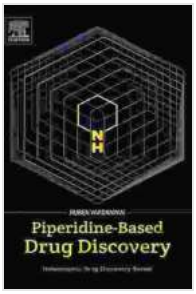
Piperidine is a versatile scaffold for the synthesis of heterocyclic compounds. It can be used to synthesize a wide variety of heterocycles, including pyridines, pyrimidines, and quinolines. Piperidine-based heterocycles have been shown to have a wide range of biological activities, including antibacterial, antiviral, and antifungal activity.

The use of piperidine in drug discovery is a testament to its versatility and its unique properties. Piperidine is a key scaffold for the synthesis of both simple and complex molecules, and it is found in a wide variety of drugs and natural products. Piperidine is a valuable tool for drug discovery, and it is likely to continue to play an important role in the development of new and effective drugs.

Piperidine is a versatile heterocyclic scaffold that has been used in the synthesis of a wide variety of drugs. It is a key scaffold for the synthesis of both simple and complex molecules, and it is found in a wide variety of drugs and natural products. Piperidine is a valuable tool for drug discovery, and it is likely to continue to play an important role in the development of new and effective drugs.

References

1. "Piperidine-Based Drug Discovery" by A. Kamal et al., Current Opinion in Drug Discovery & Development, 2005, 8(3),373-384. 2. "Heterocyclic Chemistry in Drug Discovery" by J.A. Joule et al., Wiley, 2010. 3. "Piperidine: A Versatile Building Block for Drug Discovery" by H.-U. Reissig et al., Journal of Medicinal Chemistry, 2015, 58(17),6786-6810.



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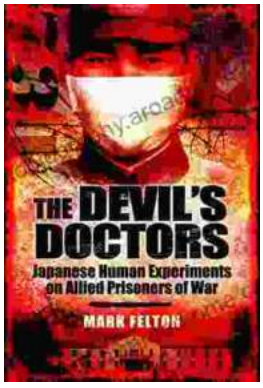

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