<<药物化学>>

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内容概要

李绍顺、周虎臣主编的《药物化学(第2版英中双语注解版)》是药物化学专业唯一一本英中双语教材。以英文编写，加以中文注释。

《药物化学(第2版英中双语注解版)》分为17章，前6章为总论部分，主要阐述药物研发的基本理论和基本方法，内容包括新药研究中先导化合物的发现和结构优化、药物与受体相互作用、酶及其抑制剂的基础理论和应用、药物代谢的基本概念、前药的设计及计算机辅助药物设计的基础知识。
第7～17章为各论，按目前新药研究的重点领域分类，主要内容包括神经系统药物、镇痛及麻醉药、代谢综合征治疗药、胃肠道系统药物、心血管系统药物、抗肿瘤、抗病毒、抗真菌、抗感染及免疫抗炎药，重点讲解各类药物治疗现状、作用机制、结构与活性关系，代表性药物的合成路线设计、临床应用及药物代谢的相关知识。

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书籍目录

章节摘录

版权页： 插图： 3. 4 Irreversible Enzyme Inhibitors A competitive irreversible enzyme inhibitor, also known as an active-site directedirreversible inhibitor or an enzyme inactivator, is a compound whose structure is similar tothat of the substrate or product of the target enzyme and which generally forms a covalentbond to an active site residue. In the case of irreversible inhibition it is not necessary tosustain the inhibitor concentration to retain the enzyme-inhibitor interaction. Because this is anirreversible reaction, once the target enzyme has reacted with the irreversible inhibitor, thecomplex cannot dissociate, and, therefore, the enzyme remains inactive, even in the absenceof additional inhibitor. This effect could translate into the requirement for smaller and fewerdoses of the drug. Even though the target enzyme is destroyed by the irreversible inhibitor, itdoes not mean that only one dose of the drug would be sufficient to destroy the enzymepermanently. Yes, it destroys that copy of the enzyme permanently, but our genes areconstantly encoding more copies of proteins that diminish in concentration. As the enzymeloses activity, additional copies of the enzyme are synthesized, but this process can take hoursor even days. In some cases, however, particularly where genetic translation of the targetenzyme is slow, it may be safer to design reversible inhibitors whose effects can be controlledmore effectively by termination of their administration. The term irreversible is a loose one; either a very stable covalent bond or a labile bondmay be formed between the drug and the enzyme active site. As pointed out earlier, some tight-binding reversible inhibitors also are functionally irreversible.

编辑推荐

《药物化学(英中双语注解版)(第2版)》对第一版进行了修订，增减了相关内容，形式更紧凑，内容更精练。
介绍药物研发的基本理论与方法，以及目前新药研究重点领域的药物治疗现状、药物的作用机理、构效关系等，并以代表性药物作为案例进行讲解。
适合药物化学专业的师生和专业技术人员使用。

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