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Note generali Includes index.

Nota di contenuto Greene's Protective Groups in Organic Synthesis; Contents; Preface to

the Fifth Edition; Preface to the Fourth Edition; Preface to the Third Edition; Preface to the Second Edition; Preface to the First Edition; Abbreviations; 1. The Role of Protective Groups in Organic Synthesis; Properties of a Protective Group; Historical Development; Development of New Protective Groups; Selection of a Protective Group from This Book; Synthesis of Complex Substances: Two Examples (As used in the Synthesis of Himastatin and Palytoxin) of the Selection, Introduction,

and Removal of Protective Groups

Synthesis of HimastatinSynthesis of Palytoxin Carboxylic Acid; 2. Protection for the Hydroxyl Group, Including 1,2- and 1,3-Diols; Ethers; Substituted Methyl Ethers; Substituted Ethyl Ethers; Methoxy-Substituted Benzyl Ethers; Silyl Ethers; Esters; Bisfluorous Chain-Type Propanoate (Bfp-OR) Ester; Proximity-Assisted Deprotection for Ester Cleavage; Miscellaneous Esters; Sulfonates, Sulfenates, and Sulfinates as Protective Groups for Alcohols; Carbonates; Carbamates; Protection for 1,2- and 1,3-Diols; Monoprotection of Diols; Cyclic Acetals and

Ketals; Chiral Ketones; Cyclic Orthoesters

Silyl DerivativesCyclic Carbonates; Cyclic Boronates; 3. Protection for Phenols and Catechols; Protection for Phenols; Ethers; Silyl Ethers;

Esters; Carbonates; Carbamates; Phosphinates; Sulfonates; Protection for Catechols (1,2-Dihydroxybenzenes); Cyclic Acetals and Ketals; Cyclic Esters; Protection for 2-Hydroxybenzenethiols; 4. Protection for the Carbonyl Group; Acetals and Ketals; Acyclic Acetals and Ketals; Cyclic Acetals and Ketals; Chiral Acetals and Ketals; Dithio Acetals and Ketals; Cyclic Dithio Acetals and Ketals; Monothio Acetals and Ketals; Diseleno Acetals and Ketals

Miscellaneous DerivativesO-Substituted Cyanohydrins; Substituted Hydrazones; Oxime Derivatives; 1,2-Adducts to Aldehydes and Ketones; Cyclic Derivatives; Protection of the Carbonyl Group as Enolate Anions, Enol Ethers, Enamines, and Imines; Monoprotection of Dicarbonyl Compounds; Selective Protection of - and -Diketones; Cyclic Ketals, Monothio and Dithio Ketals; 5. Protection for the Carboxyl Group; Esters; General Preparation of Esters; General Cleavage of Esters; Transesterification; Enzymatically Cleavable Esters; Substituted Methyl Esters; 2-Substituted Ethyl Esters

2,6-Dialkylphenyl EstersSubstituted Benzyl Esters; Silyl Esters; Activated Esters; Miscellaneous Derivatives; Stannyl Esters; Amides and Hydrazides; Amides; Hydrazides; Protection of Sulfonic Acids; Protection of Boronic Acids; 6. Protection for the Thiol Group; Thioethers; S-Diphenylmethyl, Substituted S-Diphenylmethyl, and S-Triphenylmethyl Thioethers; Substituted S-Methyl Derivatives: Monothio, Dithio, and Aminothio Acetals; Substituted S-Ethyl Derivatives; Silyl Thioethers; Thioesters; Thiocarbonate Derivatives; Thiocarbamate Derivatives; Miscellaneous Derivatives Unsymmetrical Disulfides

Sommario/riassunto

An indispensable reference for any practicing synthetic organic or medicinal chemist, this book continues the tradition of Greene's as comprehensive in the overall scope of coverage, providing the most relevant and useful examples to illustrate each methodology. Presents valuable material, on the application of protective groups in organic chemistry, that is not easily found by casual searching Helps chemists to plan, investigate, and carry out organic syntheses in an efficient manner Adds over 2800 new references to update since the publication of the last edition Reviews of the prior edition