Record Nr. UNINA9910830833803321 Vitamin B12 and B12-proteins [[electronic resource]]: lectures **Titolo** presented at the 4th European Symposium on Vitamin B12 and B12-Proteins / / edited by Bernhard Krautler, Duilio Arigoni and Bernard T. Golding Pubbl/distr/stampa Weinheim;; Chichester,: Wiley-VCH, c1998 **ISBN** 1-281-76388-8 9786611763886 3-527-61219-X 3-527-61218-1 Descrizione fisica 1 online resource (560 p.) Altri autori (Persone) KrautlerBernhard ArigoniDuilio GoldingBernard T Disciplina 572.58 Soggetti Vitamin B12 Vitamin B12 - Synthesis Vitamin B12 - Structure-activity relationships Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Vitamin B12 and B12-Proteins; Contents; I B12: An Overview; 1. B12 Coenzymes, the Central Theme; II B12: Biosynthesis; 2. B12-Biosynthesis in an Aerobic Organism: How the Pathway was Elucidated: 3. Vitamin B12 Biosynthesis in Pseudomonas denitrificans; 4. How Nature Synthesizes B12 Without Oxygen: Discoveries Along the Ancient, Anaerobic Pathway: 5. The Biosynthesis of Vitamin B12: Assembly of the Tetrapyrrole Ring System; 6. Investigations on the Biosynthesis of the 5,6- Dimethylbenzimidazole Moiety of Vitamin B12; III BI2-Proteins: Enzymatic Methyltransfer 7. Cobdamin-Dependent Methionine Synthase from Escherichia coli: Structure and Reactivity8. EPR Spectroscopic Evidence That in the Energy Conserving Methyltransferase Complex from Methanogenic

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This timely and topical book reviews the important developments in the 'B12-field' with regard to biological, chemical, pharmaceutical and medicinal aspects. In over 30 chapters the approx. 100 internationally renowned authors give deeper insight into the prospering research activites around B12. This book is a must for everybody who works with or on vitamins and porphyrine (-like) ring systems. Topics of particular interest include: Biosynthesis of Vitamin B12; B12-catalyzed enzymatic reactions and their mechanisms; structural B12-chemistry; reactivity of B12 and B12-models; structure