CHAPTER 5

BIOMEDICINE

Doctoral Theses

031. BANSAL (Sandhya)

Systematic Study of Benzimidazoles in Search of Selective Antimicrobials Targeting Topoisomerase.

Supervisor: Dr. Vibha Tandon

Th 18831

Abstract

Studies antimicrobial activity of bisubstituted analogue DMA and Hoechst33342 on gram negative and gram positive bacteria. It has observed quite good antimicrobial effects, against gram negative bacterial including the clinical samples for the same. The strains under consideration for studies are gram negative bacteria emphasis bas been given to clinical strains of E. coli also examined the effect of DMA on and A. baumannii, S. flexneri, A. typhimurium and P. areuginosa.

Contents

- 1. Introduction. 2. Present work. 3. Objectives of work. 4. Materials and methods. 5. Results and discussion. 6. Summary and conclusions. 7. Reference. 8. Appendix.
- 032. CHAUDHARY (Ritu)

2-(1-Benzotriazolyl) Pyridine : A Novel Bidentate Ligand for the Coupling Reactions.

Supervisor: Dr. Akhilesh Kumar Verma

Th 18832

Abstract

Desings benzotrizole based ligand 2-(1-benzotriazolyl)pyridine, BtPy and the unility of this ligand for the coupling reactions, synthesis of indolo-, pyrrolo[2,1-a]isoquinolines and synthesis of naphthyridines.

Contents

1. Coupling reactions: A general introduction. 2A. Palladium-catalyzed heck reaction. 2B. Palladium-catalyzed oxidative-heck reaction. 3. Syntheses of Indolo and Pyrrolo[2,1-a]isoquinolines. 4. Syntheses of Indolo and Pyrrolo[2,1-f][1,6]naphthyridines.

033. VIG (Leena)

Interaction of Human Sin3B with KLF11 and CBFA2T2 Proteins and Their Effect on Gene Expression.

Supervisor : Prof. Daman Saluja

Th 18833

Abstract

Analyzes the interaction of hSin3B with two other transcription repressor proteins, the kruppel like factor 11 (KLF11), an important transcription factro and CBFA2T2, another co-repressor while KLF11 being and established transcription repressor had DNA binding activity CBF A2T2 has not been shown to bind DNA.

Contents

1. Introduction of human Sin3B with KLF11. 2. Effect of CBFA2T2 of Gene Expression. 3. Summary.