



NTHRYS NTHRYS Protocols

Presently NTHRYS covers various protocols under its Research Assistance Services

Please choose your desired protocol under respective field or call / sms / whatsapp us on 9849854748 for assistance.

!!! If there exists a protocol, NTHRYS will move mountains to get it for you !!!

Courier the samples

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Wait for stipulated time

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Receive Results Online

rDNA Technology

1. DNA Extraction from Human Blood
2. DNA Extraction from Bacteria
3. DNA Extraction from Plant Leaf
4. DNA Extraction from Chicken Liver
5. Primer designing using Bioinformatics Tools
6. Optimization of PCR parameters
7. PCR
8. Agarose Electrophoresis using 1 - 10 Kbp ladder
9. Extraction & purification of amplified DNA from Agarose gels using spin columns

10. Cultivation of pUC 18 vector bearing bacterial strain
11. Plasmid [pUC 18] isolation
12. Restriction digestion of pUC18 vector using EcoRI
13. 5' End DNA modification of restriction digested plasmid sample [Addition of Poly Ts]
14. TA Cloning [PCR Product and sample obtained above]
15. DNA ligation
16. Cultivation of DH5 alpha cells and Competent cell preparation using cultivated DH5 alpha cells
17. Bacterial Transformation [using competent cells and cloned vector obtained above]
18. Blue white screening [checking for the transformed colonies]

Biochemistry

19. Analysis

1. Protein Analysis
2. Carbohydrate Analysis
 1. Hexose Assay
 2. Pentose Assay
 3. Disacchharide Assay
 4. Polysacchharide Assay
3. Lipid Analysis
 1. Lipid Extraction
 1. Modified Bligh and Dyers Method for Phospholipid Extraction
 2. Folch Extraction
 2. Thin Layer Chromatography
4. Nucleic Acid Analysis

20. Assays

1. Enzyme Assays
 1. Enzyme Kinetics [Basics]
 2. Amylase Assay
 3. Protease Assay

21. Protein Purifications

1. Protein Precipitations
2. Column Chromatography

22. Protein Analysis

1. Protein Estimations
 1. Absorbance Assays
 2. Colorimetric Assays
 3. Commercial Protein Assays
2. Spectrometric Analysis
3. SDS PAGE
4. Gel Staining
 1. Coomassie Blue Staining
 2. Silver Staining

23. Lipid Extractions

1. Grey Method for Phosphatidylinositol Phosphate Extraction
 2. Modified Alex Brown Method for Phosphatidylinositol Phosphate Extraction
 3. Hexane Extraction for Neutral Lipids
 4. Glycolipid Extraction
24. **Immunoprecipitations**
25. **Medical Plant Extraction studies**
1. Medical Plant Extraction using Soxhlet Apparatus
 2. Hydrextractions
 3. Methanolic Extractions
 4. Hexane Extractions
 5. Ethanolic Extractions
26. **Phytochemical Analysis**
27. **HPLC**
28. **GC**
29. **Western Blotting**
30. **Enzyme Assays**
1. Lipid Kinase Assays
 2. Protein Kinase Assays
 3. Protein Tyrosine Phosphatase Assay
 4. Alkaline Phosphatase Assay
 5. Caspase Assay
31. **Functional Assays**
1. Apoptosis Assay
 2. XTT Cell Proliferation Assay
 3. Chemotaxis Assay
 4. Matrigel Invasion or Cheoinvasion Assay
32. **Mammalian Cell Culturing**
1. Primary Cell Isolation & culturing
 2. Splenocyte Isolation
 3. Isolation of Peripheral Blood Lymphocytes
33. **Tissue Culture**
1. Adherent Cells
 2. Suspension Cells
 3. Cell Maintenance
 4. Cell Counting
34. **Anticarcinogenic Assays**
1. MTT Assay
 2. Tryphan Blue Assay

Microbiology

35. Isolation & Screening of soil microorganisms
36. Microbial stainings [Normal & Gram Staining]
37. Bacterial Motility test

38. Catalase Test
39. Mannitol Salt Agar Test
40. Blood Agar plates assay
41. Optochin sensitivitiy test
42. Bacitracin sensitivitiy test
43. CAMP Test
44. Bile esculin agar test
45. Nitrate broth test
46. Spirit blue agar test
47. Starch hydrolysis test
48. Coagulase test
49. Oxidase test
50. Sugar broth with durham's tubes test [Carbohydrate metabolism test]
 - Glucose Test
 - Sucrose Test
 - Mannose Test
51. Methyl Red Voges Proskauer Test [MRVP Test]
52. Kliger's Iron Test
53. MacConkey Agar Test
54. Simmon's Citrate Test
55. Ureas Test
56. Sulfur Indole motility media test
57. Indole Test
58. Kliger's Iron Test

Animal Tissue Culture

59. Cultivation of Human Bone Marrow Stem Cells
60. Cultivation of Human Umbilical Cord Blood Stem Cells
61. Cultivation of Human Cardiomyocytes
62. Cultivation of HeLa Cells
63. Preparation and Use of Conditional Media [Using Human Cardiomyocytes]
64. Isolation and cultivation of aphid cells
65. Isolation and cultivation of fibroblasts from human tooth extracts

Plant Biotechnology

66. Aseptic culture techniques for establishment and maintenance of cultures
67. Preparation of stock solutions of MS basal medium and plant growth regulator stocks
68. Micropropagation of Tobacco plant by leaf disc culture
69. Micropropagation of Rice by indirect organogenesis from embryo
70. Preparation of competent cells of E. coli for harvesting plant transformation vector
71. Transformation of competent cells of E. coli with plant transformation vectors
72. Small scale plasmid preparation from E. coli

73. DNA check run by Agarose Electrophoresis
74. Restriction digestion of insert plasmid and binary vector
75. Electroelution of insert DNA from agarose gel slice
76. Mobilization of recombinant Ti plasmid from common laboratory host (E. coli) to an Agrobacterium tumefaciens strain
77. Agrobacterium tumefaciens-mediated plant transformation
78. Direct DNA delivery to plant by Particle Bombardment
79. Isolation of plant genomic DNA by modified CTAB method
80. Molecular analysis of putative transformed plants by Polymerase Chain Reaction

Immunotechnology

81. Extraction of IgG [Immunoglobulin G] from plasma / serum
82. Purification of extracted Immunoglobulins [Using Dialysis process]
83. Pepsin digestion and purification of digested IgG
84. Preparation of Antigens for Immunizations [including Adjuvant selection strategies]
85. SDS PAGE
86. ELISA [Sandwich ELISA - Qualitative]
87. RID
88. DID [Ouchterlony]
89. Immunization of Mice or Rabbit

Applied Immunology

Immunoassays

90. Competitive Radio Immunoassay [RIA]
91. Enzyme Linked Immunosorbent Assay [ELISA]
92. Solid-phase radioimmunoassay for cell-surface antigens

Isolation / Preparation / Production of Cells of Immune System

93. Isolation of normal peritoneal macrophages
94. Preparation of lymphocytes from blood
95. Preparation of lymphocytes from solid lymphoid organs
96. Production of human T-lymphocyte lines

Plant Tissue Culturing

97. Preparation of customized media and stock solution for selected plant tissue culturing experimentations
98. Preparation of Explants
99. Callus initiation and Maintenance in selected plants
100. Shoot & Root Induction in selected plants

Nanobiotechnology

101. Coating Antibodies [IgG] to Carbonanofibers
102. Coating of antibody coated carbon nanofibers to gold surface
103. Preparation of liposomal nanomedicines
104. Preparation of carbon nanofibers and liposomal conjugates

Aeromicrobiology

105. Air Sampling using Rotorod sampler
106. Air Sampling using Burkard sampler
107. Air Sampling using Anderson sampler
108. Enumeration of Fungi collected from Air Samples
109. Enumeration of Bacteria collected from air samples
110. Enumeration of total airborne bacteria, yeast and mold
111. Slide culture technique for fungi
112. Simple & Gram staining of Microorganisms
113. Cultivation & Isolation of single colonies of bacteria and fungi and storage
114. Isolation of Total DNA from isolated bacteria & Identification
115. Isolation of Total DNA from isolated fungi & Identification

Applied Immunochemistry

116. Human Tissue Collection & preparation
117. Tissue Fixation
118. Tissue Sectioning
119. Tissue Preservation
120. Sample / Tissue Labelling using IHC markers
121. Immunohistochemistry staining
122. Microscopic Observation, Photography & Data Analysis
123. Trouble Shooting

Clinical Immunology

124. C-Reactive Protein Test [To identify the presence of inflammation]
125. Erythrocyte Sedimentation Rate Test [To detect the presence of inflammation caused by one or more conditions]
126. Serum Autoantibody Assay [To check the presence of autoantibodies in blood]
127. Periodic acid–Schiff [PAS] staining [Staining macrophages in Erythroleukemia]
128. Total WBC Count
129. Differential WBC Count
130. Platelet Count
131. RBC Count
132. Systemic Lupus Erythematosus Diagnostic test
133. Rheumatoid Arthritis diagnostic test

General Immunology

- 134. Antigen design
- 135. Human Thymus Cell Antigen preparation
- 136. Host Selection preparation for Immunization
- 137. Selection of Adjuvant for Antigen & Complete Antigen Preparation
- 138. Immunization Schedule
- 139. Testing Bleeds using ELISA
- 140. Bleeds & Plasma Collection
- 141. Antisera processing
- 142. Purification of Processed Antisera
- 143. Antisera Affinity testing against initial antigen used for Immunization

144. Spectro Metallurgical Testing

1. CHEMICAL TESTING

1. Optical Emission Spectrophotometer

1. Ferrous Alloys Steels

Low Alloy Steels, Stainless Steels, Free Cutting Steels, High carbon High chromium Steels, Tool Steels, Cast Iron and SG Iron

2. Aluminium Alloys

Al - Si Alloys

Al - Mg - Zn Alloys

3. Copper Alloys

Chemical analysis of Brass, Leaded Bronze, Gunmetals, Phosphorous Bronze

2. MECHANICAL TESTING by TUE-600C

1. Tensile strength

Yield strength

% Elongation

Bend and Rebend

Testing of Tor Steels, Steels, Non-Ferrous metals

2. Hardness

Brinell Hardness
Rockwell Hardness

3. Impact Charpy and Izod at room and sub zero temperatures
3. SALTSPRAY TESTS by Neutral Salt Spray.

NTHRYS NTHRYS Protocols Information

NTHRYS REGISTRATION PROCESS

1. Candidates have to pay **Rs 3000/-** in the below mentioned account to complete Registration Process for selected services.
2. **Registration fee is NOT ADDITIONAL AMOUNT** we will reduce this from the main fee at the time of joining.
3. After completing the fee payment, please scan the payment receipt as well as your college identity card [Any identity card for student proof] and email it to helpdesk@nthrys.org
4. After receiving this email NTHRYS staff will send you a Registration No, Fee receipt & a Final Confirmation document to confirm the registration. For any additional queries regarding registration process please call / sms / whatsapp on 9849854748.

NTHRYS Account Information

Account Name: NTHRYS BIOTECH LABS

Account No: 400800301000092

Bank Name: Vijaya Bank

West Marredpalli Branch - Secunderabad, Andhra Pradesh, India

Branch Under RTGS: Yes

Branch Under NEFT: Yes

RTGS - IFSC Code: VIJB0004008