Jayagen Biologics
Analytical Laboratory
(JBAL)

Our Priorities
- **Promote Research**
- **Precise Report**
- **Prompt Response**

Jayagen Biologics Analytical Laboratory (JBAL) extended their analytical services to primarily help the academic/professional biotechnologists and small scale industries. Jayagen aims at providing more precise and reproducible results on any given samples by our expertness on prompt manners. The following area should be covered with the state-of-the-art instrumentations and cutting edge technologies with affordable cost.

Analytical Services and their Charges at JBAL

S. No.	Analysis/Technique	Charges Per Sample (INR)	Charges Per Samples [Above 5 Samples] (INR)
	Microbial Identifications		
1	Molecular Identification of Bacteria [16S rRNA Gene Identification]*	4500	3750
2	Molecular Identification of Fungi [ITS1 & ITS4 Gene Identification]*	4750	4000
3	Molecular Identification of Actinomycetes [16S rRNA Gene Identification]*	4750	4000
4	Molecular Identification of Algae [18S rRNA Gene Identification]* *DNA isolation, PCR Amplification, Sequencing, Phylogeny tree and GenBank Submission with Results photos and Descriptions	4500	3750
5	Polyphasic Taxonomical Approach Novel Taxa Erection of Bacteria, Fungi, Actinomycetes and Algae with Descriptions	25000	22000
6	Biochemical characterizations for Bacteria	2500	2250
7	Fungal morphological Identification	1500	1250
8	Algal morphological Identification	1500	1250
9	Cell wall fatty acid profiling	4000	3500
	DNA/Protein Sequencing, Primer Synthesis and Design		
10	Sequencing up to 1000 bases	800	700
11	Primer Synthesis 100 nmole per base	15	14
12	Primer Design	750	650
13	Gene Synthesis up to 3 kb size (per base)	15	14
14	N-Terminal Sequencing per amino acid	2500	2250
15	C- Terminal Sequencing	2500	2250
16	Peptide Synthesis per amino acid	2300	2200
17	PCR Product Purification	350	300
18	Primer walking	2500	2000
	DNA Barcoding for Plants and Animals		
19	Plastid trnH-psbA Intergenic Spacer gene - Plants	4500	4000
20	Chloroplast gene rbcL and matK gene - Plants	6500	6000
21	Mitochondrial Cytochrome C oxidase sub unit 1 gene - Animals	4500	4000

22	Biocode LIMS and GenBank Submission	1000	800
	Molecular Techniques and Recombinant DNA Technology		
23	Polymerase Chain Reaction (Instrument alone)	800	700
24	Bacterial Genomic DNA Isolation	1000	800
25	Fungal Genomic DNA Isolation	1000	800
26	Plant Genomic DNA Isolation	1000	800
27	Cell line Genomic DNA Isolation	1000	800
28	Animal Genomic DNA Isolation	1000	800
29	Plasmid DNA Isolation	1250	1000
30	Chloroplast DNA isolation	1500	1250
31	Mitochondrial DNA isolation	1500	1250
32	Total RNA isolation	1500	1250
33	Cloning, Vector Construction	2500	2250
34	Restriction Fragment Length Polymorphisms (RFLP)	3000	2500
35	Amplified Fragment Length Polymorphisms (AFLP)	2500	2250
36	Amplified Ribosomal DNA Restriction Analysis (ARDRA)	3000	2500
37	Random Amplification of Polymorphic DNA (RAPD)	3500	3000
38	cDNA Synthesis	3500	3250
39	cDNA Library Construction	15000	14000
40	Competent Cell Preparation	750	600
41	Gel Electrophoresis – SDS-PAGE	800	600
42	Gel Electrophoresis – Native PAGE	750	600
43	Gel Electrophoresis – Agarose	600	500
44	Gel Electrophoresis Zymogram Analysis	1000	950
45	Enzyme-Linked Immunosorbent Assay (ELISA)	750	600
46	Southern Blot analysis (without probes)	2500	2250
47	Western Blot analysis (without ABs)	2750	2500
48	Northern Blot analysis (without probes)	2500	2250
	Biotechnological Database Analyses		
49	BLAST Analysis	800	700
50	Pubmed Search	800	700
51	GenBank Submission	800	700
52	RDP Analysis	800	700
53	Swissprot Analysis	2500	2250
54	Mascot Program	2500	2250
55	MEGA, Treecon, Clustal W and Chromas Analysis for Phylogeny Tree Constructions	1000	800
56	*In silico* drug search	2500	2250
57	*In silico* PCR analysis	1000	850
	***In vitro* Bioassays**		
58	Antibacterial activity Plate assay (Five pathogens) in triplicate	1500	1250
59	Antifungal activity Plate assay (Five pathogens) in triplicate	1500	1250
60	Antimicrobial activity Plate assay (3+2; Bacteria+Fungi) in triplicate	1500	1250

61	Antibacterial activity Microbroth assay (Five pathogens) in triplicate	1750	1500
62	Antifungal activity Microbroth assay (Five pathogens) in triplicate	1750	1500
63	Antimicrobial activity Microbroth assay (3+2; Bacteria + Fungi)×3	1750	1500
64	Killing Curve Assay	3000	2750
65	Antibiotic Susceptibility test (12 Antibiotics)	600	500
66	Anticancer activity (One Cell lines, Cytotoxicity, MTT assay)	4000	3500
67	Anticancer activity Mechanisms: DNA fragmentation	1750	1500
68	Anticancer activity Mechanisms: Apoptotic Protein expression – 3 Markers	20000	18000
69	Antioxidant activity – DPPH scavenging	750	600
70	Antioxidant activity – ABTS scavenging	750	600
71	Antioxidant activity – FRAP	750	600
72	Antioxidant activity– TRAP	750	600
73	Antioxidant activity – Reducing power	600	500
74	Antioxidant activity – FTC	600	500
75	Antioxidant activity – TBA	600	500
76	Plant Growth Promoting Activity	2500	2250
77	Insecticidal activity	2500	2250
	Enzymology		
78	Enzyme assays – Qualitative	500	400
79	Enzyme assays – Quantitative	750	600
80	Enzyme Screenings	125	100
81	Enzyme Kinetics	2500	2250
82	Enzyme – Application (One)	2500	2250
83	Enzyme Purification	12000	11000
84	Enzyme Immobilization	750	600
85	Trypsin Digestion for Identification	3000	2750
	Phytochemical Analysis		
86	Total Phenols	500	400
87	Alkaloid Content	600	500
88	Flavanoid Content	600	500
89	Terpenoid Content	600	500
90	Saponin Content	600	500
91	Vitamins and Minerals Content (10 parameters)	3000	2750
92	Nutritional Analysis	5000	4500
93	Total Carbohydrates Content	750	600
94	Total Proteins Content	750	600
95	Total Lipid Content	750	600
96	Melanin Content	600	500
97	Total Chlorophyll Content	750	600
98	β - Carotene Content	1000	850
	Purification of Active metabolites		
99	Soxhlet Extraction of Metabolites per solvent	1250	1200

100	Cold Extraction of Metabolites per solvent	800	750
101	Cold Shaking Extraction of Metabolites per solvent/liter	1250	1200
102	Silica Gel Column Chromatography Low resolution 100-200 mesh	7000	6500
103	Silica Gel Column Chromatography High resolution 200-400 mesh	7000	6500
104	Sephadex LH20 Column Chromatography	12000	11000
105	Ion Exchange Column Chromatography	8000	7500
106	Size Exclusion Column Chromatography (Gel Permeation Column Chromatography)	8000	7500
107	Affinity Column Chromatography	12000	11500
108	Flash Chromatography	12000	11500
109	Thin Layer Chromatography (TLC) per plate (E-Merck)	1000	950
110	Preparative High Performance Liquid Chromatography per hour	2500	2400
111	Bioactives purification from Bacteria/Actinomycetes/Fungi/Algae/ Medicinal Plants/Animals parts/Drugs/Churnam/Extract – Extraction to elucidation with all the materials and methods and results write up and Photographs – **One Compound**	45000	40000
	Spectral Analyses and Structure Elucidation		
112	UV-Vis Spectrometry (UV-Vis spectrum) SCANNING	350	300
113	Infra Red spectrum (FT-IR, KBr pellet, UV-Vis-NIR)	500	450
114	NMR spectrum ^{1}H NMR	1000	850
115	NMR spectrum ^{13}C NMR	1000	850
116	NMR spectrum 2D NMR	2500	2400
117	Mass Spectrum GC-MS	1500	1300
118	Mass Spectrum ESI-MS	1500	1300
119	Mass Spectrum LC-MS	2500	2250
120	Mass Spectrum LSI-MS	2500	2250
121	Mass Spectrum Maldi-Tof MS	2500	2250
122	High Performance Liquid Chromatography (HPLC)	2500	2250
123	High Performance Thin Layer Chromatography (HPTLC)	2500	2250
124	Atomic absorption Spectroscopy (AAS) per Metal	350	300
125	CHN Analysis	1000	900
126	CHNSO Analysis	1500	1400
127	XRD Single Crystal analysis	2500	2250
128	Powder XRD	700	650
129	Zetasizer (Particle size analyzer)	1700	1500
130	Zeta Potential (Drug carrier)	2300	2100
131	Circular Dichroism Spectroscopy	1000	750
132	Interpretations of single Spectrum	800	700
133	Structure Elucidation using spectral data	3500	3000
134	Structure search using Spectral data	1500	1000
	Microscopy		
135	Scanning Electron Microscopy (SEM)	1000	950
136	SEM – EDAX	2500	2250
137	Transmission Electron Microscopy (TEM)	3000	2750

138	Microtome analysis	3000	2500
139	Atomic Force Microscopy (AFM)	1500	1250
140	Phase Contrast Microscopy	600	500
141	Fluorescence Microscopy	600	500
142	Confocal Microscopy	3500	3250
143	Light Microscopy	200	150
144	Stereo Microscopy	200	150
	Microbiological Analyses		
145	PCR Identification of Pathogens	3500	3250
146	Total Coli forms	750	600
147	Fecal Coli forms	750	600
148	Total Enterococci	800	700
149	Total *E. coli*	600	500
150	Total *Salmonella*	600	500
151	Total *Shigella*	600	500
152	Total *Staphylococcus*	600	500
153	Total Vibrio	600	500
154	Total Plate Count	750	600
155	Total combined yeast and Mold count	750	650
	Physical and Chemical Properties Analysis		
156	pH analysis	120	100
157	Conductivity Analysis	120	100
158	Viscosity Analysis	750	600
159	Melting/Boiling Point Analysis	300	250
160	Density Analysis	500	450
161	Calorific Value Analysis	2000	1750
162	Ash Content	500	400
163	Moisture Content	400	350
164	Soluble fiber content	800	600
165	Total fiber content	800	600
	Analytical Sample Preparation & Instrumentation		
166	Lyophilizer 12 h	500	400
167	Gel documentation per gel	300	250
168	TLC Documentation per TLC plate	200	150
169	Rotoevaporator per liter	500	400
170	UV-Transilluminator per gel	200	150
171	Ultra Sonicator per minute	250	200
172	Microwave Oven per 20 minute	300	250
173	Water bath per hour	100	75
174	Environmental Shaker per day	200	150
175	Water bath Shaker per day	300	250
176	Oil bath per day	200	150
177	Speed vac per ten minutes	250	200

178	Vacuum Oven per day	300	250
179	Gel rocker per day	200	150
180	Centrifugation up to 10000 rpm 2 mL/15 minutes	25	20
181	Centrifugation up to 10000 rpm 15 mL/15 minutes	50	40
182	Centrifugation up to 10000 rpm 50 mL/15 minutes	100	80
183	Centrifugation up to 10000 rpm 250 mL/15 minutes	250	200
184	Homogenizer 1.5 mL	10	10
185	Homogenizer 5 mL	20	20
186	Homogenizer 10 mL	30	25
187	Homogenizer 50 mL	50	40
188	Homogenizer 100 mL	100	80
189	Essential oil Extractor per day	500	400
190	Soxhlet extractor per day	500	400
191	Electrophoresis Unit per day	250	200
192	Separating/shaking funnel – 100 mL per day	50	40
193	Separating/shaking funnel – 250 mL per day	100	80
194	Separating/shaking funnel – 500 mL per day	200	150
195	Separating/shaking funnel – 1000 mL per day	250	200
196	Inoculation Chamber per day	500	400
197	UV irradiation chamber per hour	300	250
198	Elisa Reader per plate	300	250
199	Micro titer plate reader per plate	500	400
200	Spray dryer per liter	200	150

Terms and Conditions:

- Payment should be paid as DD/Cheque in the favor of M/s. **Jayagen Biologics** payable at **Chennai**.
- Payment and samples are send through registered parcel Services or by person to M/s. Jayagen Biologics, Jayagen Biologics Analytical Laboratory, No. 15/6, Second Floor, Lake View Road, Kottur, Chennai 600085, Tamil Nadu, India. Phone: 044- 43100300; Mobile: +919962511686.
- Results and methodologies (If applicable) are sent through e-mail and print outs, within 10 working days after shipment received. In case of purified compound, remaining sample will be handed over.
- Work order should be given priority basis, which enable us to serve you better.
- All prices are subject to change, and Jayagen Biologics reserves the right to modify the prices at its discretion at any point in time.