APPENDIX A

British Drug House Ltd. Poole, England.

Sodium hydrogen phosphate heptahydrate

Sodium dihydrogen phosphate monohydrate

(Tris [hydroxymethyl] amino methane)

Pharmacia Fine Chemicals, Uppsoala, Sweden.

DEAE Sephadex A-50

Bio-gel Sephadex G-100

Merck

Absolute Ethanol

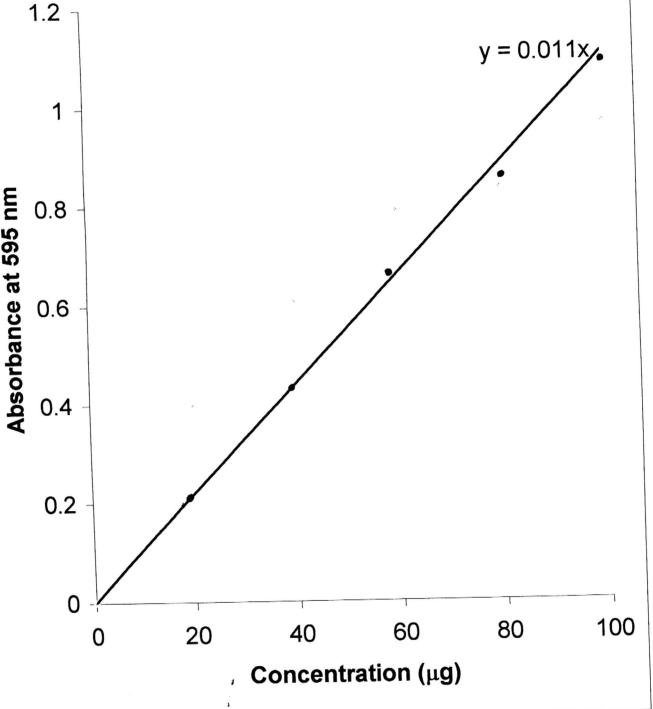
Sigma

Syringaldazine (4-Hydroxy-3,5 – dimethoxybenzaldehyde azine)

Preparation of Buffers

1. 0.1M sodium citrate buffer pH 5.5 : 0.1M Disodium hydrogen citrate solution adjusted to pH 5.5 with 1M NaOH.
2. 0.1M Tris-HCl buffer pH 7.0 : 0.1M (Tris[hydroxymethyl]amine methane) adjusted to pH 7.0 with 1M HCl.
3. 0.1M Sodium dihydrogen phosphate monohydrate adjusted to pH 6.8

Figure 4.0: Standard Curve for Protein Estimation by Protein-dye Binding Method of Bradford (1976)



APPENDIX C

Raw mean data for thermal stability studies

Temperature (^{0}C)	Free Enzyme (Abs/min)	Immo. Enzyme (Abs/min)
4	0.18	0.18
20	0.18	0.18
30	0.18	0.18
40	0.09	0.10
50	0.03	0.04
60	0.018	0.027

Calculation to enzyme units : $\frac{\text{(Abs/min)}}{\text{10 beads}}$ x 150 beads x 25 times dilution factor

Example : $\frac{0.18 \times 150 \times 25}{10} = 67.5\ \text{U} \approx 70\ \text{U}$

Raw mean data for storage stability studies at 4^0C

Days	Free Enzyme (Abs/min)	Imm. Enzyme (Abs/min)
0	0.18	0.18
2	0.11	0.13
4	0.09	0.108
6	0.07	0.08
8	0.04	0.05
10	0.02	0.04
12	0	0.018
14	0	0

Raw mean data for storage stability studies at 25^0C

Time (Days)	Free enzyme (Abs/min)	Imm. Enzyme (Abs/min)
0	0.18	0.18
2	0.09	0.1
4	0.04	0.05
6	0.018	0.03
8	0.009	0.010
10	0.003	0.005
12	0.001	0.001
14	0	0

Raw mean data for optimum concentration of enzyme for immobilization

Amount of enzyme (µl)	Abs/min
50	0.04
100	0.18
150	0.31
200	0.36
250	0.72
300	0.90
400	0.85
500	0.81
600	0.78