



Figure 3.22 Time dependence curves of propranolol serum concentration in rats using *in situ* single pass intestinal perfusion. Rats were administered propranolol alone 1 mg/ml, propranolol with glucosamine 10 mg/ml, propranolol with cimetidine 1 mg/ml, and propranolol with rifampin 2 mg/ml. The data are presented as mean \pm SEM (n=6). Significant effect was seen between propranolol only and propranolol with GlcN ($p < 0.05$).