Figure 3.9. Calibration curve of atorvastatin

The calibration curves revealed linearity in the range of 0.5-1.5 mg/ml for all the three drugs dissolved in the diluent with $R^2 > 0.99$. According to the calibration curves and the intercepts, the lower limit of detection is the lowest in case of atorvastatin followed by glimepiride and then amlodipine. But the RSD% in the linear range and for each of the calibration curve is between 0.03-0.32 mg/ml for amlodipine (Table 3.10), 0.03-0.36 mg/ml for glimepiride (Table 3.11) and 0.18-0.46 mg/ml for atorvastatin (Table 3.12).

Table 3.10. RSD% for each of the calibration points of amlodipine

Concentration (mg/ml)	Average area	RSD%
0.5	114782	0.03
0.75	169626	0.05
1.0	220728	0.23
1.25	276765	0.21
1.5	331793	0.32