



*Lactobacillus* strain for the production of bacteriocin was isolated from milk samples. Confirmation of the strain was done through several morphological and chemical tests. Maximum production of bacteriocin was estimated by measuring zone of inhibition, which was directly related to bacteriocin activity. Optimum conditions for growth and bacteriocin production by the selected strain was found as; incubation period; 72 hr, incubation temperature; 30 °C and the medium pH; 6. Fructose was found as a best carbohydrate source, while tryptophan was found as finest source of nitrogen. MRS media showed maximum production of bacteriocin when compared to other media. Partial purification of bacteriocin was done by ammonium sulfate precipitation and maximum purification folds were found after 70 % saturation. SDS- PAGE confirmed that molecular weight of purified bacteriocin was 9.3 kDa. Moreover, it showed activity at broad range of pH and temperature, while maximum activity was observed at 6 and 30 °C, respectively. Complete inactivation of bacteriocin was found after action of pepsin. The research work indicated possible roles of bacteriocin in controlling pathogenic bacteria.