In this study immunocytochemical method was used to investigate the projection of host brain noradrenergic (NA) fibers into transplanted hippocampus. Albino rat embryo (17±1 day) hippocampus (transplant) was used to implant into adult rat (host) hippocampus. Ninety days after operation, host was perfused and fixed. Frozen sections were cut and ABC immunocytochemical reaction was carried out. In the pyramidal cell layer, granular cell layer, molecular layer and in the dentate gyrus, there were diffused TH positive fibers of diameter 0.5-1 μm. In the transplanted hippocampus some TH positive fibers were also found, mainly located in the cellular layer and molecular layer. Comparing with the host hippocampus, there were much less fibers and their diameter was larger, only a few are greater than 1μm. Some of these fibers were isolated single terminals, some showed branching shape or plexiform shape. Besides, we had also used the modified Golgi-Cox method and observed that the pyramidal cells and granular cells of the transplanted hippocampus were well developed. Cell bodies and projections were clear. Comparing with host hippocampus, the laminated arrangement of the cellular layers in transplanted hippocampus was poorly developed. Some showed a diffused distribution, dendrite number and its small spines number were also fewer. The above result indicates that NA fibers can grow into the transplanted hippocampus. The embryonic hippocampus after transplanted into the host can develop normally.