2.5 Synthesis of: 2-methyl-1-[4-(amino-1-yl)but-2-yn-1-yl]-2,3-dihydro-1H-indole AZ2-AZ7

A mixture of 2-methyl-1-(prop-2-yn-1-yl)-2,3-dihydro-1H-indole (1.71 g, 0.01 mol) paraformaldehyde (0.45 g, 0.015 mol) and the cyclic amine around (0.01 mol), and cuprous chloride catalytic amount (0.03 g), in peroxide-free dioxane 30 ml was refluxed for 1 hour. Filtered and evaporated under reduced pressure. The solution was extracted with petrolium ether and water, ether layer was separated resulting in the desired product AZ1, AZ2-AZ7. (Figure 21 & 22). The IR,^{1}H-NMR, ^{13}C-NMR, DSC, and elemental analysis for each compound are shown in experimental part.