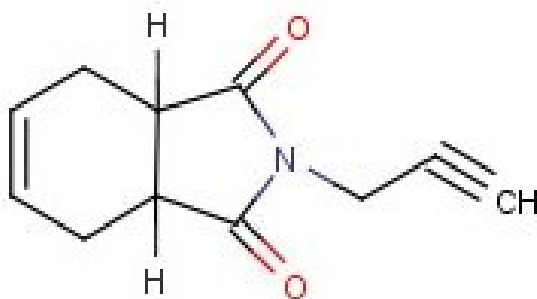


## Chapter Three

### Results

AM: 2-(prop-2-yn-1-yl)-2,3,3a,4,7,7a-hexahydro-1H-isoindole-1,3-dione



$^1\text{H-NMR}$  (DMSO-  $d_6$ ):  $\delta$ , 3.15(s, 1H), 4.05(s, 1H,  $\text{CH}_2\text{-C}$ ), 5.90 (s, 2H,  $\text{CH}=\text{CH}$ ), (Fig 3.1).

IR: 3300, (acetylenic C-H stretch), 2150, (C, C triple bond stretch), 1700, ( $\text{C}=\text{O}$  stretch), 1600, (Ar  $\text{C}=\text{C}$  stretch), 1200, (N-C stretch), (Fig 3.2).

Elemental analysis ( $\text{C}_{11}\text{H}_{11}\text{N}_1\text{O}_2$ ): Calc: C (69.83%), H (5.86%), N (7.4%).

Found: C (66.2%), H (5.8%), N (8.3%).