^{1}HNMR (DMSO-*d6)*: δ 1.8 (m , 4H, β -methylene group), 2.87 (m , 4H, α – methylene group of tetryl moiety), 4.21(s, 2H, methylene proton),6.98-8.20 (m, 14H, Ar-H), 10.04(s, 1H, NH exchangeable with D_2O). ^{13}C-NMR δ 35.9(methyl of Ar), 64.2 (methylene N-CH_2), 85.7(S-CH), 122.4, 126.9, 127.2, 127.7, 128.0, 128.4, 128.7, 129.0, 129.5, 130.1, 130.6, 131.2, 131.8, 132.3, 132.5, 133.9, 134.5, 138.2, 139.2, 140.2, 143.5, 160.6, 165.4, 166.5, 167.2, 167.8, 168.5(C=N, C=O). (M.wt.590.69): % Anal. Calc. for $C_{33}H_{30}N_6O_3S$: C, 67.10; H, 5.12; N ,14.23; S, 5.43; found: C, 67.7; H, 5.9; N, 14.18; S, 5.37.

N-(4-chloro-1,3-dioxoisoindolin-2-yl)-2-(1-oxo-4-(5,6,7,8-tetrahydronaphthalen-2-yl) phthalazin-2(1H)-yl)acetamide (13)

A mixture of hydrazide**3**(3.87g, 0.01mol),4-chlorophthalic anhydride(1.4g, 0.01mol) was heated in an oil bath at 180^{0}C for 1 h. The fused mixture was then treated with ethanol and filtered. The crude product was crystallized from dioxane. Yield 92%, white crystals. m.p. 262-263^{0}C. IR(KBr) ν(cm^{-1}) 1650, 1690, 1735, 1790(4CO). ^{1}HNMR (DMSO-*d6)*: δ 1.8 (m , 4H, β -methylene group), 2.87 (m , 4H, α – methylene group of tetryl moiety), 4.20(s, 2H, methylene proton of gly. precusor), 7.26-8.11Anal.Calc.$C_{28}H_{21}ClN_4O_4$for (M.wt.512): %C 65.56; H,4.13; N,10.92;Cl,6.91;O,12.48; found: C,65.51, H,4.9, N,10.86;Cl,6.84;O,12.4365.56, H 4.13, N 10.92, Cl6.91;O,12.48; 58.04, H 3.31, N 10.83, Br 15.45; found: C 58.01, H 3.33, N 10.85, Br 15.46. (m, 11H, Ar-H), 9.11(s, 1H, NH exchangeable with D_2O). ^{13}C-NMR δ 38.3-47.8(methylene groups), 49.7 (methylene N-CH_2), 126.9, 127.7, 128.7, 129.1, 129.5, 129.8, 130.1, 130.6, 131.2, 131.7, 132.5, 133.9, 134.2, 134.5, 138.2, 139.4, 143.5, 145.6, 158.7, 160.6, 165.4, 168.2, 169.0 (C=N, 3C=O). MS: m/z = 518, 516, Anal. Calc. for $C_{25}H_{17}N_4O_4Br$ (M.wt.517): %C 58.04, H, 3.31; N, 10.83; Br, 15.45; found: C, 58.01; H, 3.33; N, 10.85; Br, 15.46.

(Z)-N-(2-oxoindolin-3-ylidene)-2-(4-(5,6,7,8-tetrahydronaphthalen-2-yl)phthalazin-2 (1*H*)-yl)acetohydrazide (14)

Amixture of hydrazide**3**(3.87g, 0.01mol), isatin(1.4g, 0.01mol) and few drops of acetic acid in ethanol (20mL) was refluxed 10 h. After cooling, the obtained solid was collected and filtered. The crude product was crystallized from ethanol. Yield 96%, white crystals. m.p. 218-220^{0}C. IR(KBr) ν(cm^{-1}) 1660, 1670, 1705(3CO). ^{1}HNMR (DMSO-*d6)*: δ 1.8 (m , 4H, β -methylene group), 2.87 (m , 4H, α – methylene group of tetryl moiety), 4.06(s, 2H, methylene proton of gly. precusor), 7.19-8.25 (m, 11H, Ar-H), 9.8 and 11.7(s, 2H, 2NH exchangeable with D_2O). ^{13}C-NMR δ 41.1-47.4(methylene groups), 55.7 (methylene N-CH_2), 126.9, 127.7, 128.7, 129.1, 129.5, 129.8, 130.1, 130.6, 131.2, 131.7, 132.5, 133.9, 134.2, 134.5, 138.2, 139.4, 140.3, 143.5, 145.6, 158.7, 162.1, 165.7, 168.4(C=N, 2C=O). MS: m/z = 517, 515. (M.wt.516) Anal. Calc. for $C_{28}H_{25}N_5O_2$: C, 72.55; H ,5.44; N, 15.11; O, 6.90; found: C ,72.48; H 5.38; N, 15.9; O, 6.87.

2-((1-oxo-4-(5,6,7,8-tetrahydronaphthalen-2-yl)phthalazin-2(1*H*)-yl)methyl)-9H-benzo[e][1,2,4]triazolo[5,1-b][1,3]thiazin-9-one (15)

A mixture of hydrazide**3**(3.87g, 0.01mol), ethyl-2-thiocyanatobenzoate(0.01 mole) was refluxed in absolute ethanol(30mL) for 9 h. After cooling, the separated solid was collected by filtration, dried and crystallized from ethanol. Yield 96%, white crystals. m.p. 184-186^{0}C. IR(KBr) ν(cm^{-1}) 1620(C=N), 1673 (CO) and 3170(NH). ^{1}HNMR (DMSO-*d6)*: δ 1.8 (m , 4H, β -methylene group), 2.87 (m , 4H, α – methylene group of tetryl moiety), 4.01(s, 2H, methylene proton of gly. precusor), 6.7(s, 1H, CH=), 7.11-8.21 (m, 11H, Ar-H). ^{13}C-NMR δ 35.9(methyl of Ar), 64.2 (methylene N-CH_2), 122.4, 126.9, 127.2, 127.7, 128.4, 128.7, 129.0, 129.5, 130.1, 130.6, 131.2, 132.5, 133.9, 134.5, 138.2, 143.5, 160.6, 165.4, 166.5, 167.2, 168.2, 169.0 (C=N, C=O). MS: m/z = 472, 470. (M.wt.491.56)Anal. Calc. for $C_{28}H_{21}N_5O_2S$: C, 68.41; H,4.31; N,14.25; S,6.52; found: C, 68.38; H,4.27; N,14.20; S,6.48.

4-(5,6,7,8-tetrahydronaphthalen-2-yl)-2-((2S,3R,4R,5S,6R)-3,4,5-trihydroxy-6-(hydroxymethyl)tetrahydro-2H-pyran-2-ylamino)-1,3,4thiadiazol-2-yl)methyl)phthalazin1(2*H*)-one(16)

In one pot reaction of a mixture of hydrazide (0.774g, 0.002mol), D (+)glucosyl bromide (0.34g;0.002mol), ammonium isocyanate (0.03 mol) in pyridine(20mL) was refluxed for 6h. After cooling, the reaction mixture poured onto ice/H_2O. The solid that formed was filtered off, dried and crystallized from ethanol. Yield 86%, colourless crystals. m.p. 290-292^{0}C. IR(KBr) ν(cm^{-1}) 1650(CO), 3233(NH), 3440(OH). ^{1}HNMR (DMSO-*d6)*: δ 1.8 (m , 4H, β -methylene group), 2.12-2.62(m, 7H, H of glucose moiety), 2.87 (m , 4H, α – methylene group of tetryl moiety), 4.20(s, 2H, methylene protons),4.60(bs, 4H, OHglu), 6.9-7.8 (m, 7H, Ar-H), 9.80(s, 1H, NH exchangeable with D_2O). ^{13}C-NMR δ 39.45- 46.5(methylene groups of Ar), 52.8(methylene), 122.3, 125.7, 126.9, 127.7, 128.7, 129.1, 130.2, 131.7, 132.5, 133.9, 134.2, 134.5, 136.5, 138.2, 139.4, 140.2, 143.5, 145.6,158.7, 160.6, 165.4, 168.2 (3C=N, C=O). Anal. Calc. for $C_{27}H_{29}N_5O_6S$ (M.wt.551.61): % C ,58.79; H, 5.30; N, 12.70; found % C , 58.74; H, 5.32; N, 12.67.

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