Electronic Supplementary Material (ESI) for New Journal of Chemistry.


# Supplementary Data

**Characterization of *N*-methyl-2-(5-nitro-2-oxobenzo[*d*]oxazol-3(2*H*)-yl)-*N*-phenylacetamide (5)**

**Physical state and yield:** Yellow solid (68%)

**$R_f$:** 0.3 (25% EtOAc + hexane)

**Melting Point:** 166-167$^{o}$C

**$^{1}$H NMR (400 MHz, $CDCl_3$)**; δ 8.14 – 8.08 (1H, m), 7.78 (1H, d, *J* = 2.3 Hz), 7.60 – 7.35 (6H, m), 4.37 (2H, s), 3.34 (3H, s).

**$^{13}$C NMR (101 MHz, $CDCl_3$)** δ 164.47, 154.11, 144.60, 141.75, 132.13, 130.71, 129.22, 127.38, 119.44, 110.11, 104.88, 44.15, and 37.91.

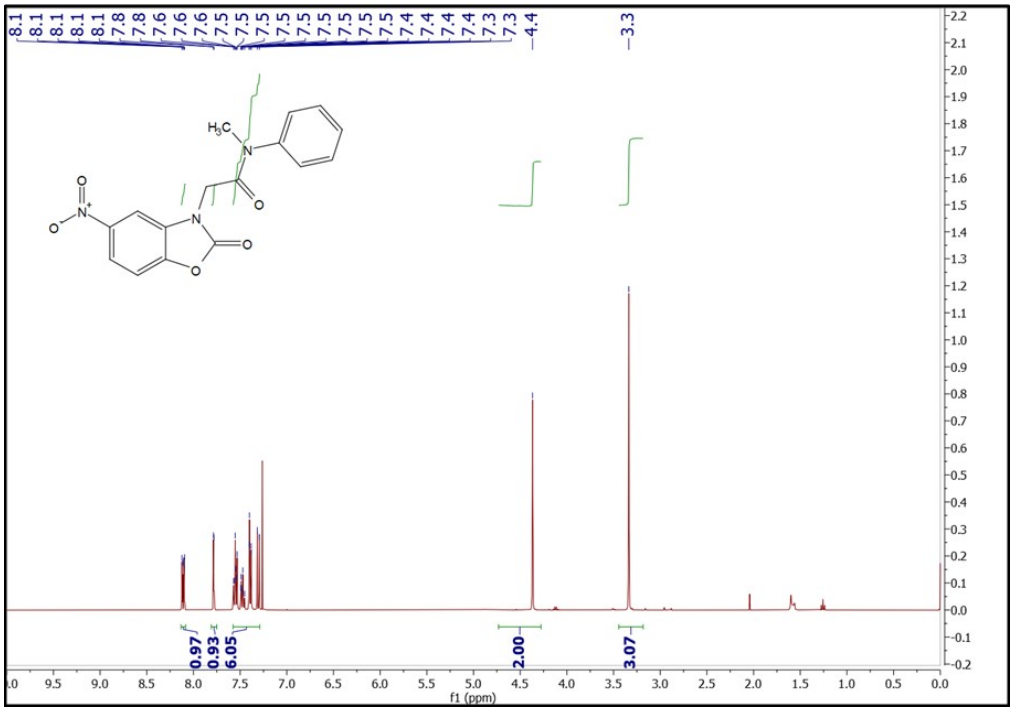


**Fig S1.** $^{1}$H NMR spectrum of compound 5 (500 MHz, $CDCl_3$)

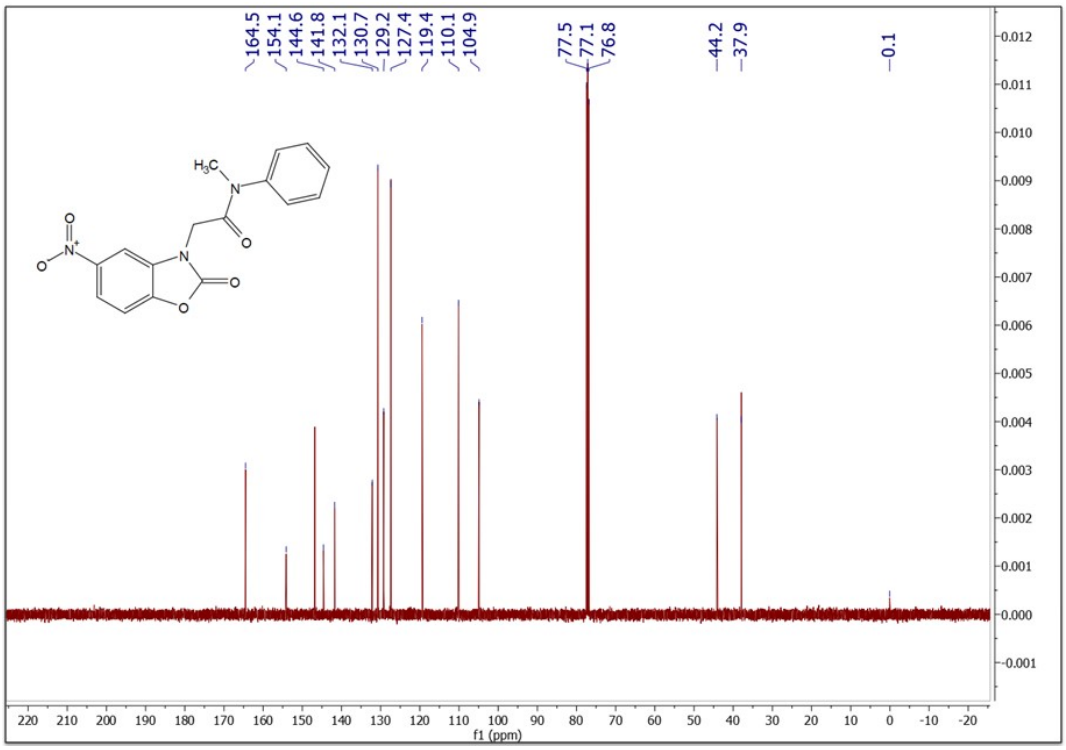


**Fig S2.** $^{13}C$ NMR spectrum of compound 5 (101 MHz, $CDCl_3$)

**Characterization of 2-(5-amino-2-oxobenzo[*d*]oxazol-3(2*H*)-yl)-*N*-methyl-*N*-phenylacetamide (6)**

**Physical state and yield:** White solid (72%)

**$R_f$:** 0.4 (20% EtOAc + hexane)

**Melting Point:** 167-168$^{o}$C

**$^{1}H$ NMR (400 MHz, DMSO-$D_6$)**; 7.54 (6H, d, J= 5.55), 6.95 (1H, d, J = 8.4 Hz), 6.29 (2H, m), 5.05 (2H, s), 4.23 (2H, s) and 3.21 (3H, s)

**$^{13}C$ NMR (101 MHz, DMSO-$D_6$)** δ 165.56, 155.14, 146.34, 142.59, 133.72, 132.36, 130.65, 128.94, 127.91, 110.23, 107.62, 95.79, 39.44.

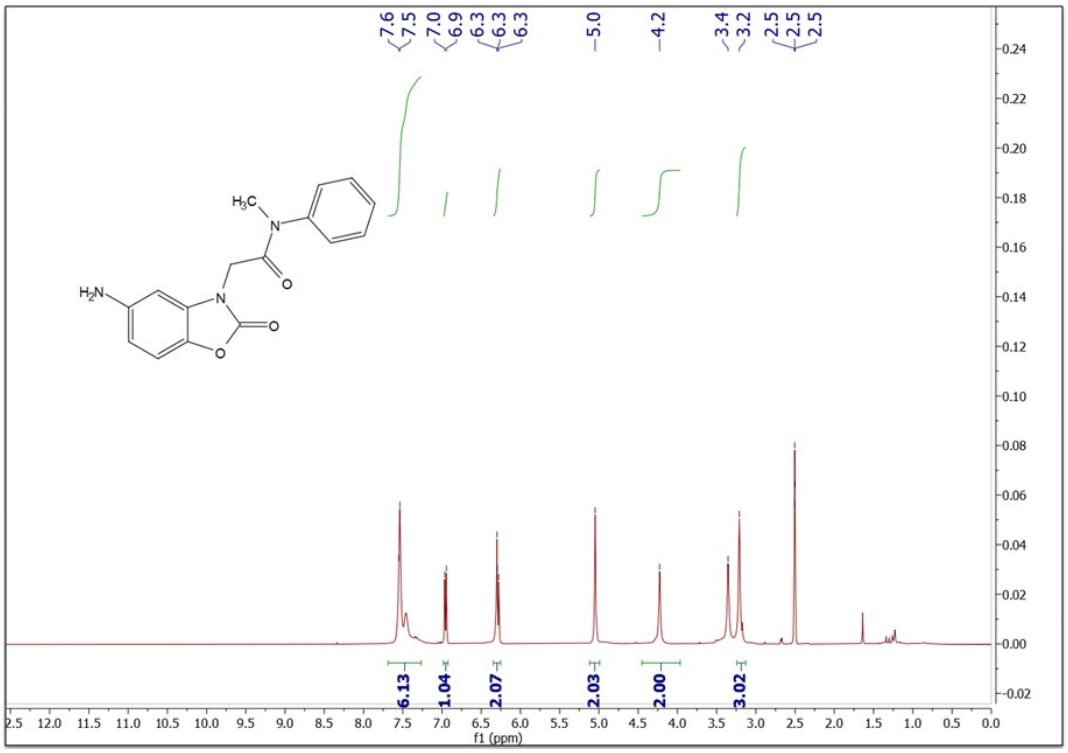


**Fig S3.** $^{1}$H NMR spectrum of compound 6 (500 MHz, DMSO-$d_6$)

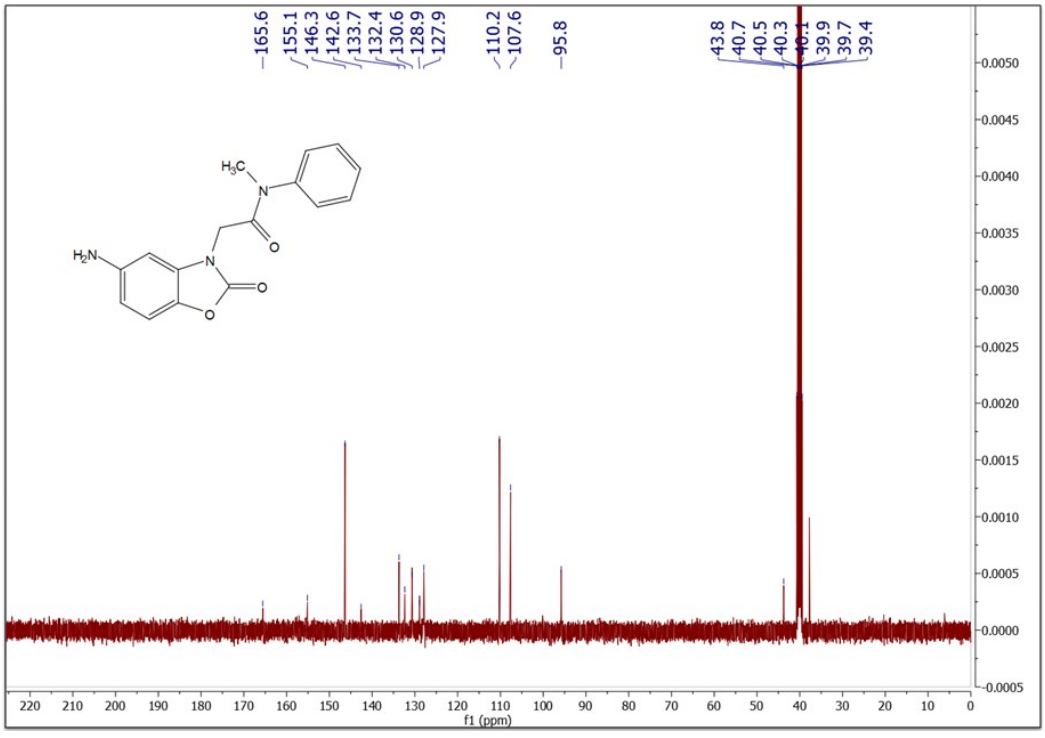


**Fig S4.** $^{13}$C NMR spectrum of compound 6 (101 MHz, DMSO-$d_6$)

**Characterization of (E)-2-(5-(((5,6-dimethoxy-2-oxo-2*H*-chromen-4-yl)methylene)amino)-2-oxobenzo[*d*]oxazol-3(2*H*)-yl)-*N*-methyl-*N*-phenylacetamide, MCBP (7)**

**Physical state and yield:** Yellow solid (65%)

**$R_f$:** 0.5 (2 % MeOH in $CHCl_3$

**Melting Point:** 270-271°C

**$^1$H NMR (500 MHz, DMSO-$D_6$)** δ 8.91 (1H, s), 8.60 (1H, d, $J$ = 9.0 Hz), 7.50 (7H m), 7.23 (2H, m), 6.86 (1H, s), 4.40 (2H, s), 3.95 (3H, s), 3.85 (3H, s), 3.22 (3H, s).

**$^{13}$C NMR (101 MHz, DMSO-$D_6$)** δ 165.39, 160.47, 158.27, 155.93, 154.64, 148.50, 146.93, 146.11, 142.42, 141.94, 135.95, 133.01, 130.64, 128.97, 127.98, 122.73, 116.27, 111.64, 110.73, 109.60, 104.22, 61.35, 56.93, 44.26, 37.79.

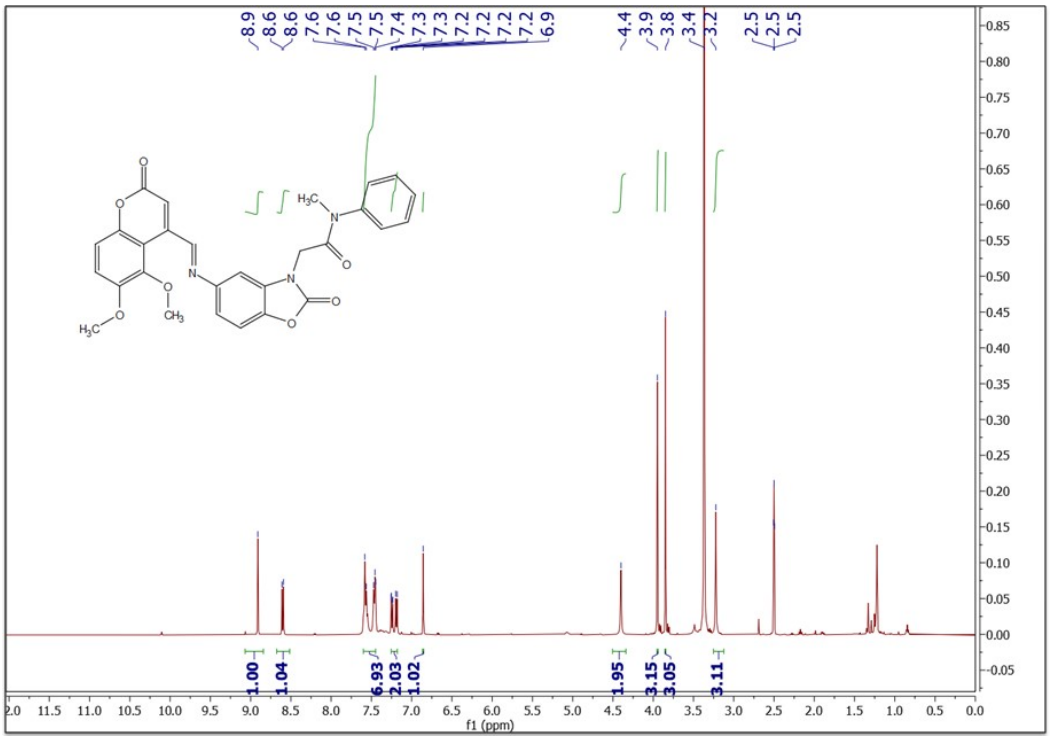


**Fig S5.** $^1$H NMR spectrum of MCBP (7) (500 MHz, DMSO-$d_6$)

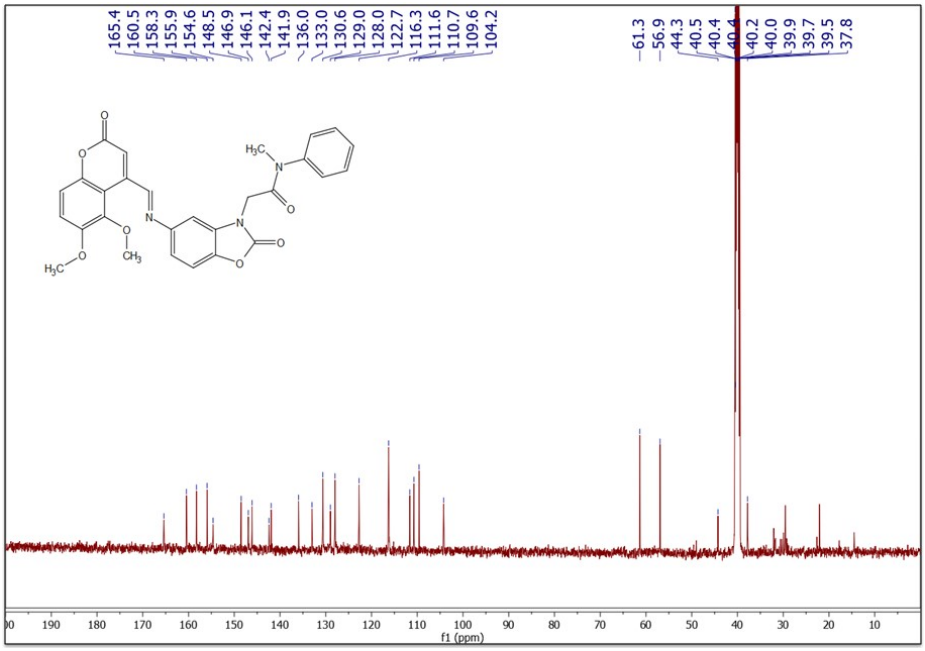


**Fig S6.** $^{13}$C NMR spectrum of MCBP (**7**) (101 MHz, DMSO-$d_6$)

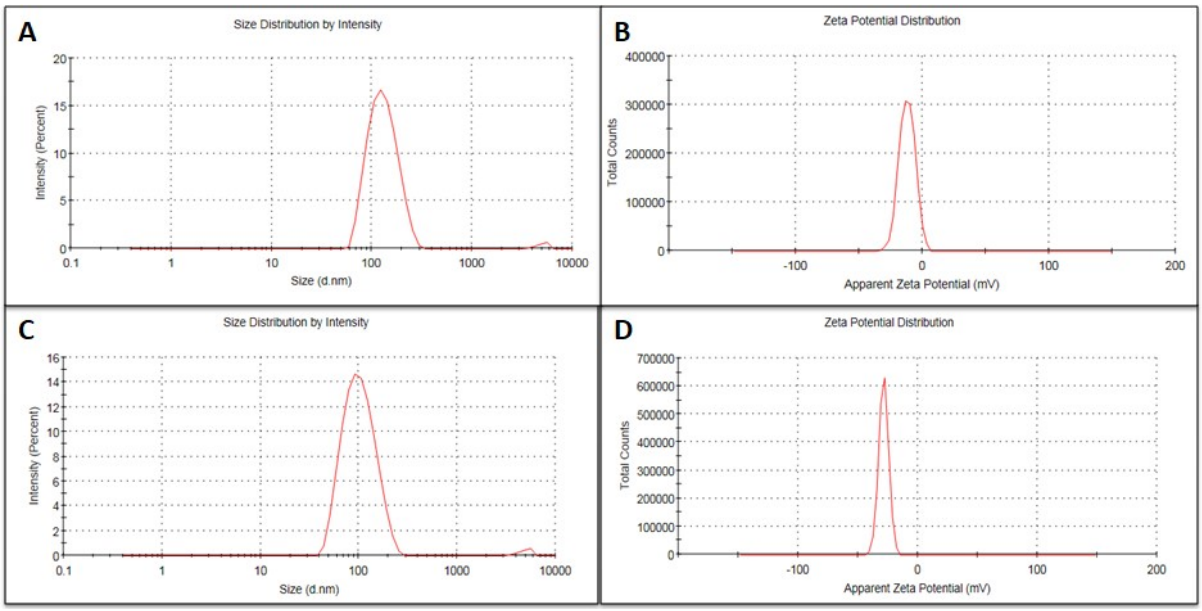


**Fig S7.** (A) and (B) Particle Size and zeta potential plot of Blank PLGA NPs; (C) and (D) Particle Size and zeta potential plot of PK11195-PLGA-NP