Supporting Information

Concomitant reduction of dimethylformamide and oxidation of vanadyl sulfate to *N,N'*-dimethylammonium decavanadate cluster and DNA, BSA binding and cytotoxicity (HeLa) studies

Table S1. Atomic coordinates (x 10^4) and equivalent isotropic displacement parameters (Å^2 x 10^3) for b. U(eq) is defined as one third of the trace of the orthogonalized U^{ij} tensor.

	x	y	z	U(eq)
C(1)	1717(4)	4966(5)	290(3)	60(1)
C(2)	3742(5)	4585(4)	937(3)	69(2)
C(3)	9152(3)	2008(4)	1037(3)	45(1)
C(4)	9806(4)	-170(4)	1544(3)	51(1)
N(1)	2835(3)	4409(3)	129(2)	44(1)
N(2)	9003(2)	902(3)	1658(2)	34(1)
O(1)	8119(2)	-1705(2)	-322(2)	28(1)
O(2)	7524(2)	545(2)	-1089(1)	22(1)
O(3)	7097(2)	2786(2)	-2065(2)	32(1)
O(4)	4882(2)	2465(2)	-1741(1)	20(1)
O(5)	2634(2)	2299(2)	-1625(2)	30(1)
O(6)	4162(2)	1951(2)	-24(1)	15(1)
O(7)	6883(2)	8(2)	649(1)	16(1)
O(8)	6419(2)	2307(2)	-235(1)	20(1)
O(9)	5801(2)	1882(2)	1516(1)	18(1)
O(10)	6259(2)	-346(2)	2384(1)	21(1)
O(11)	5217(2)	1425(2)	3355(2)	31(1)
O(12)	4058(2)	-652(2)	2615(1)	22(1)
O(13)	3647(2)	1589(2)	1750(2)	21(1)
O(14)	4672(2)	-213(2)	856(1)	14(1)
O(15)	8344(2)	-505(2)	3445(2)	35(1)
V(1)	6338(1)	1687(1)	-1644(1)	20(1)
V(2)	3778(1)	1481(1)	-1337(1)	17(1)
V(3)	5674(1)	1307(1)	386(1)	13(1)
V(4)	7005(1)	-805(1)	-554(1)	17(1)
V(5)	5045(1)	698(1)	2367(1)	19(1)

Table S2. Bond lengths [Å] and angles [°].

C(1)-N(1)	1.471(5)
C(1)-H(1A)	0.9600
C(1)-H(1B)	0.9600
C(1)-H(1C)	0.9600
C(2)-N(1)	1.476(5)
C(2)-H(2A)	0.9600
C(2)-H(2B)	0.9600
C(2)-H(2C)	0.9600
C(3)-N(2)	1.474(5)
C(3)-H(3A)	0.9600
C(3)-H(3B)	0.9600
C(3)-H(3C)	0.9600
C(4)-N(2)	1.479(5)
C(4)-H(4A)	0.9600
C(4)-H(4B)	0.9600
C(4)-H(4C)	0.9600
N(1)-H(1D)	0.8900
N(1)-H(1E)	0.8900
N(2)-H(2D)	0.8900
N(2)-H(2E)	0.8900
O(1)-V(4)	1.604(2)
O(2)-V(4)	1.742(2)
O(2)-V(1)	1.921(2)
O(3)-V(1)	1.607(2)
O(4)-V(2)	1.794(2)
O(4)-V(1)	1.873(2)
O(5)-V(2)	1.595(2)
O(6)-V(3)	1.9114(19)
O(6)-V(2)	1.9281(19)
O(6)-V(4)#1	2.0557(19)
O(7)-V(4)	1.9279(19)
O(7)-V(3)	1.9577(19)
O(7)-V(2)#1	2.034(2)
O(8)-V(3)	1.6746(19)

O(8)-V(1)	2.094(2)
O(9)-V(3)	1.7024(19)
O(9)-V(5)	2.004(2)
O(10)-V(5)	1.785(2)
O(10)-V(2)#1	1.896(2)
O(11)-V(5)	1.585(2)
O(12)-V(1)#1	1.768(2)
O(12)-V(5)	1.878(2)
O(13)-V(4)#1	1.954(2)
O(13)-V(5)	1.985(2)
O(13)-H(13)	0.73(4)
O(14)-V(3)#1	2.0982(19)
O(14)-V(3)	2.1239(19)
O(14)-V(4)#1	2.2220(19)
O(14)-V(2)#1	2.2774(19)
O(14)-V(1)#1	2.3057(19)
O(14)-V(5)	2.3388(18)
O(15)-H(15A)	0.833(18)
O(15)-H(15B)	0.827(18)
V(1)-O(12)#1	1.768(2)
V(1)-O(14)#1	2.3058(19)
V(1)-V(5)#1	3.0713(7)
V(1)-V(4)	3.0743(7)
V(1)-V(2)	3.0784(7)
V(1)-V(3)	3.0996(7)
V(2)-O(10)#1	1.896(2)
V(2)-O(7)#1	2.034(2)
V(2)-O(14)#1	2.2774(19)
V(2)-V(4)#1	3.0233(7)
V(2)-V(3)	3.1001(7)
V(2)-V(5)#1	3.1098(7)
V(3)-O(14)#1	2.0983(19)
V(3)-V(5)	3.0586(7)
V(3)-V(4)	3.0895(7)
V(4)-O(13)#1	1.954(2)
V(4)-O(6)#1	2.0558(19)

V(4)-O(14)#1	2.2220(19)
V(4)-V(2)#1	3.0233(7)
V(5)-V(1)#1	3.0713(7)
V(5)-V(2)#1	3.1098(7)

N(1)-C(1)-H(1A)	109.5
N(1)-C(1)-H(1B)	109.5
H(1A)-C(1)-H(1B)	109.5
N(1)-C(1)-H(1C)	109.5
H(1A)-C(1)-H(1C)	109.5
H(1B)-C(1)-H(1C)	109.5
N(1)-C(2)-H(2A)	109.5
N(1)-C(2)-H(2B)	109.5
H(2A)-C(2)-H(2B)	109.5
N(1)-C(2)-H(2C)	109.5
H(2A)-C(2)-H(2C)	109.5
H(2B)-C(2)-H(2C)	109.5
N(2)-C(3)-H(3A)	109.5
N(2)-C(3)-H(3B)	109.5
H(3A)-C(3)-H(3B)	109.5
N(2)-C(3)-H(3C)	109.5
H(3A)-C(3)-H(3C)	109.5
H(3B)-C(3)-H(3C)	109.5
N(2)-C(4)-H(4A)	109.5
N(2)-C(4)-H(4B)	109.5
H(4A)-C(4)-H(4B)	109.5
N(2)-C(4)-H(4C)	109.5
H(4A)-C(4)-H(4C)	109.5
H(4B)-C(4)-H(4C)	109.5
C(1)-N(1)-C(2)	113.3(3)
C(1)-N(1)-H(1D)	108.9
C(2)-N(1)-H(1D)	108.9
C(1)-N(1)-H(1E)	108.9
C(2)-N(1)-H(1E)	108.9
H(1D)-N(1)-H(1E)	107.7
C(3)-N(2)-C(4)	113.8(3)

C(3)-N(2)-H(2D)	108.8
C(4)-N(2)-H(2D)	108.8
C(3)-N(2)-H(2E)	108.8
C(4)-N(2)-H(2E)	108.8
H(2D)-N(2)-H(2E)	107.7
V(4)-O(2)-V(1)	114.05(10)
V(2)-O(4)-V(1)	114.13(10)
V(3)-O(6)-V(2)	107.69(9)
V(3)-O(6)-V(4)#1	107.84(9)
V(2)-O(6)-V(4)#1	98.68(8)
V(4)-O(7)-V(3)	105.33(9)
V(4)-O(7)-V(2)#1	99.42(9)
V(3)-O(7)-V(2)#1	108.23(9)
V(3)-O(8)-V(1)	110.18(10)
V(3)-O(9)-V(5)	110.94(10)
V(5)-O(10)-V(2)#1	115.27(10)
V(1)#1-O(12)-V(5)	114.73(10)
V(4)#1-O(13)-V(5)	113.65(11)
V(4)#1-O(13)-H(13)	116(3)
V(5)-O(13)-H(13)	115(3)
V(3)#1-O(14)-V(3)	101.44(8)
V(3)#1-O(14)-V(4)#1	91.26(7)
V(3)-O(14)-V(4)#1	95.10(7)
V(3)#1-O(14)-V(2)#1	90.13(7)
V(3)-O(14)-V(2)#1	94.54(7)
V(4)#1-O(14)-V(2)#1	169.79(9)
V(3)#1-O(14)-V(1)#1	89.34(7)
V(3)-O(14)-V(1)#1	169.18(9)
V(4)#1-O(14)-V(1)#1	85.51(6)
V(2)#1-O(14)-V(1)#1	84.39(6)
V(3)#1-O(14)-V(5)	170.95(10)
V(3)-O(14)-V(5)	86.39(7)
V(4)#1-O(14)-V(5)	92.56(7)
V(2)#1-O(14)-V(5)	84.69(6)
V(1)#1-O(14)-V(5)	82.79(6)
H(15A)-O(15)-H(15B)	111(3)

O(3)-V(1)-O(12)#1	104.35(11)
O(3)-V(1)-O(4)	101.50(11)
O(12)#1-V(1)-O(4)	93.29(9)
O(3)-V(1)-O(2)	101.06(11)
O(12)#1-V(1)-O(2)	92.85(9)
O(4)-V(1)-O(2)	154.32(9)
O(3)-V(1)-O(8)	99.92(10)
O(12)#1-V(1)-O(8)	155.71(9)
O(4)-V(1)-O(8)	82.66(8)
O(2)-V(1)-O(8)	81.53(8)
O(3)-V(1)-O(14)#1	172.87(10)
O(12)#1-V(1)-O(14)#1	82.65(8)
O(4)-V(1)-O(14)#1	79.16(8)
O(2)-V(1)-O(14)#1	76.94(8)
O(8)-V(1)-O(14)#1	73.06(7)
O(3)-V(1)-V(5)#1	138.01(9)
O(12)#1-V(1)-V(5)#1	33.75(6)
O(4)-V(1)-V(5)#1	83.73(6)
O(2)-V(1)-V(5)#1	87.67(6)
O(8)-V(1)-V(5)#1	122.04(6)
O(14)#1-V(1)-V(5)#1	49.07(5)
O(3)-V(1)-V(4)	132.23(9)
O(12)#1-V(1)-V(4)	84.51(7)
O(4)-V(1)-V(4)	125.12(6)
O(2)-V(1)-V(4)	31.17(6)
O(8)-V(1)-V(4)	78.50(6)
O(14)#1-V(1)-V(4)	46.10(5)
V(5)#1-V(1)-V(4)	64.892(17)
O(3)-V(1)-V(2)	133.63(9)
O(12)#1-V(1)-V(2)	84.34(7)
O(4)-V(1)-V(2)	32.14(6)
O(2)-V(1)-V(2)	124.25(6)
O(8)-V(1)-V(2)	79.55(6)
O(14)#1-V(1)-V(2)	47.42(5)
V(5)#1-V(1)-V(2)	60.753(16)
V(4)-V(1)-V(2)	93.505(18)

O(3)-V(1)-V(3)	130.39(9)
O(12)#1-V(1)-V(3)	125.25(7)
O(4)-V(1)-V(3)	78.30(6)
O(2)-V(1)-V(3)	77.80(6)
O(8)-V(1)-V(3)	30.47(5)
O(14)#1-V(1)-V(3)	42.60(5)
V(5)#1-V(1)-V(3)	91.580(18)
V(4)-V(1)-V(3)	60.053(15)
V(2)-V(1)-V(3)	60.237(15)
O(5)-V(2)-O(4)	102.90(11)
O(5)-V(2)-O(10)#1	101.18(10)
O(4)-V(2)-O(10)#1	93.17(9)
O(5)-V(2)-O(6)	101.62(10)
O(4)-V(2)-O(6)	94.11(9)
O(10)#1-V(2)-O(6)	153.83(9)
O(5)-V(2)-O(7)#1	100.20(10)
O(4)-V(2)-O(7)#1	156.61(9)
O(10)#1-V(2)-O(7)#1	85.82(8)
O(6)-V(2)-O(7)#1	77.65(8)
O(5)-V(2)-O(14)#1	175.48(10)
O(4)-V(2)-O(14)#1	81.52(8)
O(10)#1-V(2)-O(14)#1	79.36(8)
O(6)-V(2)-O(14)#1	76.91(7)
O(7)#1-V(2)-O(14)#1	75.33(7)
O(5)-V(2)-V(4)#1	91.07(8)
O(4)-V(2)-V(4)#1	136.29(7)
O(10)#1-V(2)-V(4)#1	124.80(7)
O(6)-V(2)-V(4)#1	42.23(6)
O(7)#1-V(2)-V(4)#1	38.98(5)
O(14)#1-V(2)-V(4)#1	85.00(5)
O(5)-V(2)-V(1)	136.30(9)
O(4)-V(2)-V(1)	33.73(6)
O(10)#1-V(2)-V(1)	82.13(6)
O(6)-V(2)-V(1)	90.16(6)
O(7)#1-V(2)-V(1)	123.47(6)
O(14)#1-V(2)-V(1)	48.20(5)

V(4)#1-V(2)-V(1)	123.00(2)
O(5)-V(2)-V(3)	136.78(9)
O(4)-V(2)-V(3)	79.28(7)
O(10)#1-V(2)-V(3)	121.94(6)
O(6)-V(2)-V(3)	35.97(6)
O(7)#1-V(2)-V(3)	81.47(5)
O(14)#1-V(2)-V(3)	42.60(5)
V(4)#1-V(2)-V(3)	63.158(16)
V(1)-V(2)-V(3)	60.221(16)
O(5)-V(2)-V(5)#1	132.37(9)
O(4)-V(2)-V(5)#1	83.80(7)
O(10)#1-V(2)-V(5)#1	31.27(6)
O(6)-V(2)-V(5)#1	125.17(6)
O(7)#1-V(2)-V(5)#1	83.33(6)
O(14)#1-V(2)-V(5)#1	48.49(5)
V(4)#1-V(2)-V(5)#1	116.50(2)
V(1)-V(2)-V(5)#1	59.512(16)
V(3)-V(2)-V(5)#1	90.844(18)
O(8)-V(3)-O(9)	106.63(10)
O(8)-V(3)-O(6)	98.03(9)
O(9)-V(3)-O(6)	97.78(9)
O(8)-V(3)-O(7)	97.06(9)
O(9)-V(3)-O(7)	94.91(9)
O(6)-V(3)-O(7)	156.60(8)
O(8)-V(3)-O(14)#1	87.39(8)
O(9)-V(3)-O(14)#1	165.84(8)
O(6)-V(3)-O(14)#1	81.83(8)
O(7)-V(3)-O(14)#1	81.10(7)
O(8)-V(3)-O(14)	165.94(9)
O(9)-V(3)-O(14)	87.40(8)
O(6)-V(3)-O(14)	80.47(8)
O(7)-V(3)-O(14)	80.55(8)
O(14)#1-V(3)-O(14)	78.56(8)
O(8)-V(3)-V(5)	144.21(7)
O(9)-V(3)-V(5)	37.74(7)
O(6)-V(3)-V(5)	92.15(6)

O(7)-V(3)-V(5)	85.94(6)
O(14)#1-V(3)-V(5)	128.13(5)
O(14)-V(3)-V(5)	49.74(5)
O(8)-V(3)-V(4)	84.00(7)
O(9)-V(3)-V(4)	131.87(7)
O(6)-V(3)-V(4)	127.75(6)
O(7)-V(3)-V(4)	37.00(6)
O(14)#1-V(3)-V(4)	45.98(5)
O(14)-V(3)-V(4)	85.94(5)
V(5)-V(3)-V(4)	116.05(2)
O(8)-V(3)-V(1)	39.35(7)
O(9)-V(3)-V(1)	145.98(7)
O(6)-V(3)-V(1)	89.84(6)
O(7)-V(3)-V(1)	90.57(6)
O(14)#1-V(3)-V(1)	48.06(5)
O(14)-V(3)-V(1)	126.61(5)
V(5)-V(3)-V(1)	175.35(2)
V(4)-V(3)-V(1)	59.567(16)
O(8)-V(3)-V(2)	85.07(7)
O(9)-V(3)-V(2)	134.10(7)
O(6)-V(3)-V(2)	36.34(6)
O(7)-V(3)-V(2)	128.29(6)
O(14)#1-V(3)-V(2)	47.28(5)
O(14)-V(3)-V(2)	85.64(5)
V(5)-V(3)-V(2)	120.68(2)
V(4)-V(3)-V(2)	92.780(18)
V(1)-V(3)-V(2)	59.541(16)
O(1)-V(4)-O(2)	104.22(11)
O(1)-V(4)-O(7)	102.71(10)
O(2)-V(4)-O(7)	95.65(9)
O(1)-V(4)-O(13)#1	98.94(11)
O(2)-V(4)-O(13)#1	94.46(9)
O(7)-V(4)-O(13)#1	153.01(9)
O(1)-V(4)-O(6)#1	97.95(10)
O(2)-V(4)-O(6)#1	157.72(9)
O(7)-V(4)-O(6)#1	77.14(8)

O(13)#1-V(4)-O(6)#1	84.11(8)
O(1)-V(4)-O(14)#1	172.58(10)
O(2)-V(4)-O(14)#1	82.81(8)
O(7)-V(4)-O(14)#1	78.62(7)
O(13)#1-V(4)-O(14)#1	77.90(8)
O(6)#1-V(4)-O(14)#1	75.14(7)
O(1)-V(4)-V(2)#1	90.33(8)
O(2)-V(4)-V(2)#1	137.21(7)
O(7)-V(4)-V(2)#1	41.59(6)
O(13)#1-V(4)-V(2)#1	123.18(7)
O(6)#1-V(4)-V(2)#1	39.08(5)
O(14)#1-V(4)-V(2)#1	85.91(5)
O(1)-V(4)-V(1)	138.30(8)
O(2)-V(4)-V(1)	34.78(7)
O(7)-V(4)-V(1)	91.90(6)
O(13)#1-V(4)-V(1)	82.35(6)
O(6)#1-V(4)-V(1)	123.48(6)
O(14)#1-V(4)-V(1)	48.39(5)
V(2)#1-V(4)-V(1)	123.94(2)
O(1)-V(4)-V(3)	139.89(8)
O(2)-V(4)-V(3)	80.37(7)
O(7)-V(4)-V(3)	37.67(6)
O(13)#1-V(4)-V(3)	120.67(7)
O(6)#1-V(4)-V(3)	81.30(5)
O(14)#1-V(4)-V(3)	42.77(5)
V(2)#1-V(4)-V(3)	63.890(16)
V(1)-V(4)-V(3)	60.380(16)
O(11)-V(5)-O(10)	105.28(11)
O(11)-V(5)-O(12)	101.91(11)
O(10)-V(5)-O(12)	92.55(9)
O(11)-V(5)-O(13)	100.18(11)
O(10)-V(5)-O(13)	154.09(9)
O(12)-V(5)-O(13)	86.77(9)
O(11)-V(5)-O(9)	102.81(10)
O(10)-V(5)-O(9)	88.65(9)
O(12)-V(5)-O(9)	153.99(8)

O(13)-V(5)-O(9)	81.06(9)
O(11)-V(5)-O(14)	174.52(10)
O(10)-V(5)-O(14)	79.87(8)
O(12)-V(5)-O(14)	79.51(8)
O(13)-V(5)-O(14)	74.54(8)
O(9)-V(5)-O(14)	75.13(7)
O(11)-V(5)-V(3)	134.11(9)
O(10)-V(5)-V(3)	81.96(7)
O(12)-V(5)-V(3)	123.30(6)
O(13)-V(5)-V(3)	76.90(6)
O(9)-V(5)-V(3)	31.32(5)
O(14)-V(5)-V(3)	43.87(5)
O(11)-V(5)-V(1)#1	133.44(9)
O(10)-V(5)-V(1)#1	84.00(7)
O(12)-V(5)-V(1)#1	31.53(6)
O(13)-V(5)-V(1)#1	81.98(6)
O(9)-V(5)-V(1)#1	123.23(6)
O(14)-V(5)-V(1)#1	48.14(5)
V(3)-V(5)-V(1)#1	92.010(18)
O(11)-V(5)-V(2)#1	138.48(9)
O(10)-V(5)-V(2)#1	33.46(6)
O(12)-V(5)-V(2)#1	81.78(6)
O(13)-V(5)-V(2)#1	121.33(6)
O(9)-V(5)-V(2)#1	85.06(6)
O(14)-V(5)-V(2)#1	46.82(5)
V(3)-V(5)-V(2)#1	63.250(16)
V(1)#1-V(5)-V(2)#1	59.734(16)

Symmetry transformations used to generate equivalent atoms:

#1 -x+1,-y,-z

Table S3. Anisotropic displacement parameters ($Å^2 x 10^3$) for b. The anisotropic displacement factor exponent takes the form: $-2\pi^2[h^2 a^{*2}U^{11} + ... + 2 h k a^* b^* U^{12}]$

	U^{11}	U^{22}	U^{33}	U^{23}	U^{13}	U^{12}
C(1)	59(3)	78(3)	45(3)	-6(2)	16(2)	-16(3)
C(2)	94(4)	36(2)	67(3)	-7(2)	-34(3)	15(2)
C(3)	45(2)	48(2)	41(2)	-2(2)	2(2)	-8(2)
C(4)	45(2)	59(3)	50(3)	-6(2)	7(2)	10(2)
N(1)	76(2)	24(2)	32(2)	-3(1)	6(2)	-2(2)
N(2)	25(2)	44(2)	31(2)	-8(1)	4(1)	-4(1)
O(1)	20(1)	33(1)	32(1)	1(1)	8(1)	7(1)
O(2)	18(1)	25(1)	23(1)	-1(1)	9(1)	-2(1)
O(3)	38(1)	30(1)	31(1)	2(1)	19(1)	-9(1)
O(4)	26(1)	18(1)	17(1)	3(1)	5(1)	0(1)
O(5)	26(1)	33(1)	30(1)	5(1)	-1(1)	10(1)
O(6)	17(1)	14(1)	15(1)	0(1)	5(1)	2(1)
O(7)	12(1)	19(1)	17(1)	-1(1)	2(1)	0(1)
O(8)	19(1)	20(1)	21(1)	-1(1)	7(1)	-4(1)
O(9)	21(1)	16(1)	17(1)	-3(1)	3(1)	-3(1)
O(10)	24(1)	25(1)	14(1)	1(1)	0(1)	1(1)
O(11)	41(1)	33(1)	20(1)	-6(1)	6(1)	-3(1)
O(12)	29(1)	23(1)	16(1)	1(1)	9(1)	-1(1)
O(13)	23(1)	23(1)	18(1)	-3(1)	11(1)	4(1)
O(14)	15(1)	15(1)	13(1)	0(1)	4(1)	0(1)
O(15)	32(1)	34(2)	38(1)	-2(1)	-6(1)	6(1)
V(1)	22(1)	21(1)	18(1)	2(1)	9(1)	-4(1)
V(2)	18(1)	19(1)	15(1)	3(1)	2(1)	3(1)
V(3)	14(1)	14(1)	14(1)	0(1)	4(1)	-1(1)
V(4)	14(1)	20(1)	18(1)	-1(1)	6(1)	2(1)
V(5)	23(1)	21(1)	13(1)	-1(1)	4(1)	0(1)

Table S4. Hydrogen coordinates (x 10^4) and isotropic displacement parameters ($Å^2$x 10^3)

	x	y	z	U(eq)
H(1A)	1165	4821	-258	90
H(1B)	1451	4567	833	90
H(1C)	1805	5871	399	90
H(2A)	4448	4204	791	104
H(2B)	3861	5485	1057	104
H(2C)	3507	4181	1490	104
H(3A)	8608	2666	1147	67
H(3B)	9923	2338	1175	67
H(3C)	9024	1741	386	67
H(4A)	9663	-855	1966	77
H(4B)	9688	-474	901	77
H(4C)	10587	123	1690	77
H(1D)	3067	4769	-384	53
H(1E)	2743	3574	14	53
H(2D)	8282	617	1536	40
H(2E)	9106	1164	2259	40
H(13)	3230(30)	1770(40)	2070(30)	33(11)
H(15A)	7680(20)	-440(30)	3150(30)	48(13)
H(15B)	8580(30)	-1250(20)	3440(30)	40(12)

Table S5. Torsion angles [°].

V(2)-O(4)-V(1)-O(3)	179.28(12)
V(2)-O(4)-V(1)-O(12)#1	73.90(12)
V(2)-O(4)-V(1)-O(2)	-29.7(3)
V(2)-O(4)-V(1)-O(8)	-82.03(11)
V(2)-O(4)-V(1)-O(14)#1	-7.96(10)
V(2)-O(4)-V(1)-V(5)#1	41.49(9)
V(2)-O(4)-V(1)-V(4)	-11.70(14)
V(2)-O(4)-V(1)-V(3)	-51.44(9)
V(1)-O(4)-V(2)-O(5)	-172.97(12)
V(1)-O(4)-V(2)-O(10)#1	-70.74(12)
V(1)-O(4)-V(2)-O(6)	84.11(11)
V(1)-O(4)-V(2)-O(7)#1	16.1(3)
V(1)-O(4)-V(2)-O(14)#1	8.01(10)
V(1)-O(4)-V(2)-V(4)#1	81.53(13)
V(1)-O(4)-V(2)-V(3)	51.18(9)
V(1)-O(4)-V(2)-V(5)#1	-40.86(9)
V(1)-O(8)-V(3)-O(9)	179.52(9)
V(1)-O(8)-V(3)-O(6)	-79.83(10)
V(1)-O(8)-V(3)-O(7)	82.23(10)
V(1)-O(8)-V(3)-O(14)#1	1.54(10)
V(1)-O(8)-V(3)-O(14)	3.0(4)
V(1)-O(8)-V(3)-V(5)	175.08(4)
V(1)-O(8)-V(3)-V(4)	47.53(8)
V(1)-O(8)-V(3)-V(2)	-45.79(8)
V(5)-O(9)-V(3)-O(8)	-175.76(10)
V(5)-O(9)-V(3)-O(6)	83.41(11)
V(5)-O(9)-V(3)-O(7)	-76.88(10)
V(5)-O(9)-V(3)-O(14)#1	-4.0(4)
V(5)-O(9)-V(3)-O(14)	3.40(10)
V(5)-O(9)-V(3)-V(4)	-78.79(12)
V(5)-O(9)-V(3)-V(1)	-175.22(4)
V(5)-O(9)-V(3)-V(2)	84.77(11)
V(1)-O(2)-V(4)-O(1)	170.15(12)
V(1)-O(2)-V(4)-O(7)	-85.18(11)

V(1)-O(2)-V(4)-O(13)#1	69.75(12)
V(1)-O(2)-V(4)-O(6)#1	-15.6(3)
V(1)-O(2)-V(4)-O(14)#1	-7.44(10)
V(1)-O(2)-V(4)-V(2)#1	-83.43(13)
V(1)-O(2)-V(4)-V(3)	-50.62(9)
V(2)#1-O(10)-V(5)-O(11)	174.00(12)
V(2)#1-O(10)-V(5)-O(12)	70.91(12)
V(2)#1-O(10)-V(5)-O(13)	-16.9(3)
V(2)#1-O(10)-V(5)-O(9)	-83.09(11)
V(2)#1-O(10)-V(5)-O(14)	-7.96(10)
V(2)#1-O(10)-V(5)-V(3)	-52.37(10)
V(2)#1-O(10)-V(5)-V(1)#1	40.53(10)
V(1)#1-O(12)-V(5)-O(11)	179.64(13)
V(1)#1-O(12)-V(5)-O(10)	-74.17(12)
V(1)#1-O(12)-V(5)-O(13)	79.90(12)
V(1)#1-O(12)-V(5)-O(9)	18.0(3)
V(1)#1-O(12)-V(5)-O(14)	5.03(11)
V(1)#1-O(12)-V(5)-V(3)	7.88(15)
V(1)#1-O(12)-V(5)-V(2)#1	-42.40(10)

Symmetry transformations used to generate equivalent atoms:

#1 -x+1,-y,-z

Table S6. Hydrogen bonds [Å and °].

D-H...A	d(D-H)	d(H...A)	d(D...A)	<(DHA)
C(1)-H(1A)...O(11)#2	0.96	2.50	3.398(5)	155.3
C(1)-H(1B)...O(12)#3	0.96	2.36	3.277(5)	159.1
C(2)-H(2A)...O(6)	0.96	2.62	3.131(5)	113.6
C(2)-H(2B)...O(3)#4	0.96	2.63	3.377(5)	134.7
C(2)-H(2B)...O(8)#4	0.96	2.58	3.387(5)	141.5
C(4)-H(4C)...O(2)#5	0.96	2.55	3.280(4)	132.6
N(1)-H(1D)...O(15)#2	0.89	1.89	2.778(4)	171.9
N(1)-H(1E)...O(1)#1	0.89	2.26	3.055(4)	148.7
N(1)-H(1E)...O(6)	0.89	2.37	3.015(4)	129.2
N(2)-H(2D)...O(7)	0.89	2.04	2.862(3)	153.2
N(2)-H(2E)...O(4)#6	0.89	2.14	2.924(3)	147.0
N(2)-H(2E)...O(15)	0.89	2.65	3.109(4)	113.1
O(13)-H(13)...O(3)#7	0.73(4)	1.96(4)	2.696(3)	178(4)
O(15)-H(15A)...O(10)	0.833(18)	1.877(19)	2.707(3)	174(4)
O(15)-H(15B)...O(9)#8	0.827(18)	2.072(18)	2.898(3)	177(4)

Symmetry transformations used to generate equivalent atoms:

#1 -x+1,-y,-z   #2 x-1/2,-y+1/2,z-1/2   #3 -x+1/2,y+1/2,-z+1/2

#4 -x+1,-y+1,-z   #5 -x+2,-y,-z   #6 x+1/2,-y+1/2,z+1/2

#7 x-1/2,-y+1/2,z+1/2   #8 -x+3/2,y-1/2,-z+1/2

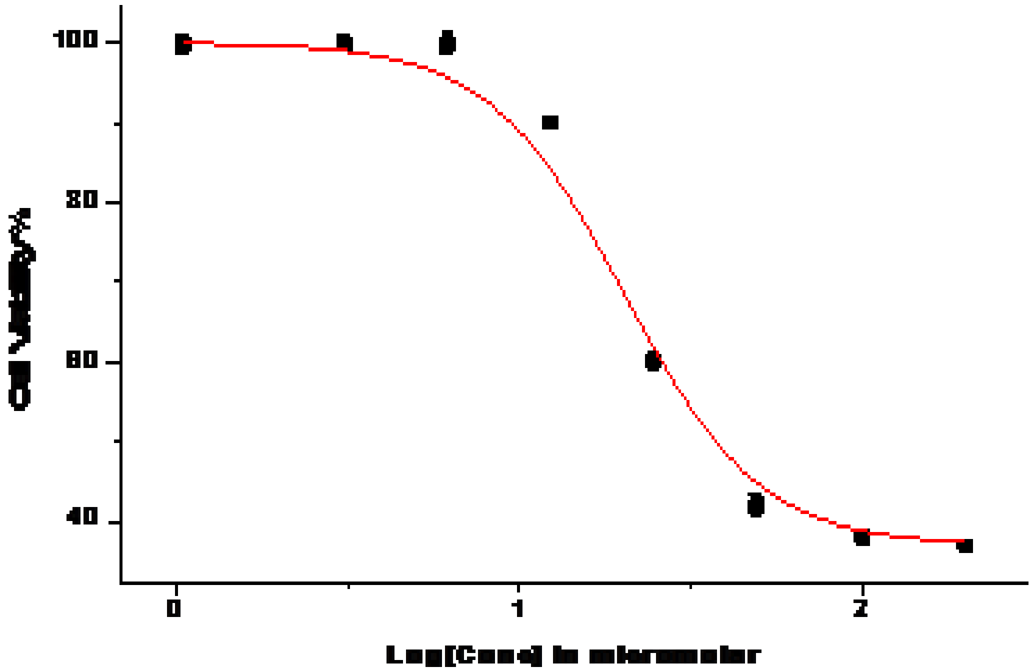

Figure S1. Cell viability *vs.* concentration plot of vanadium pentoxide.

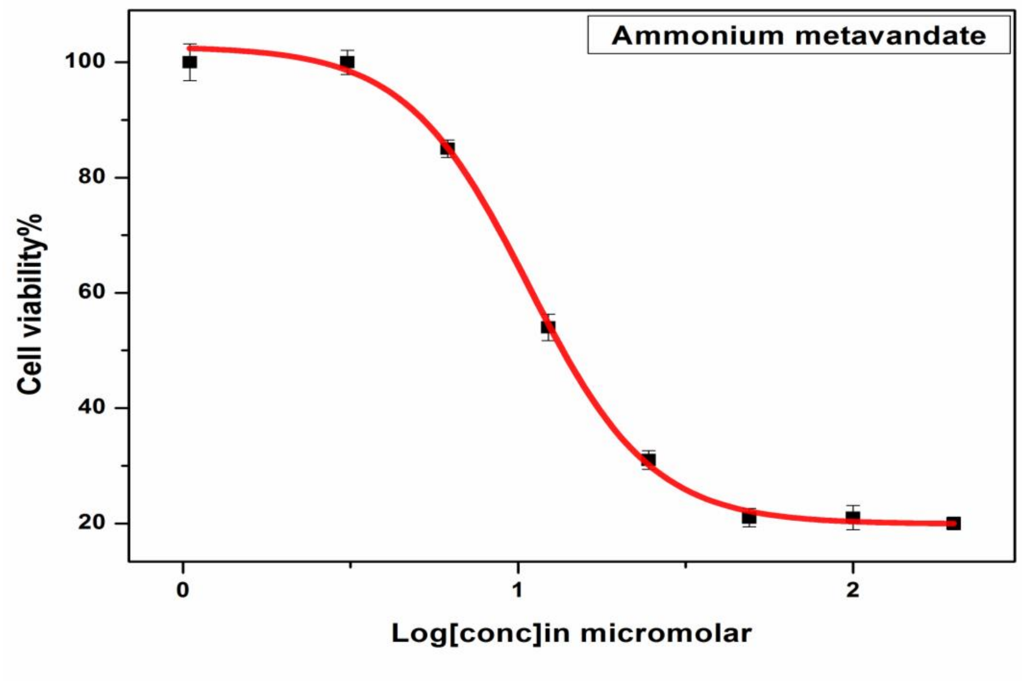

Figure S2. Cell viability *vs.* concentration plot of ammonium metavanadate.

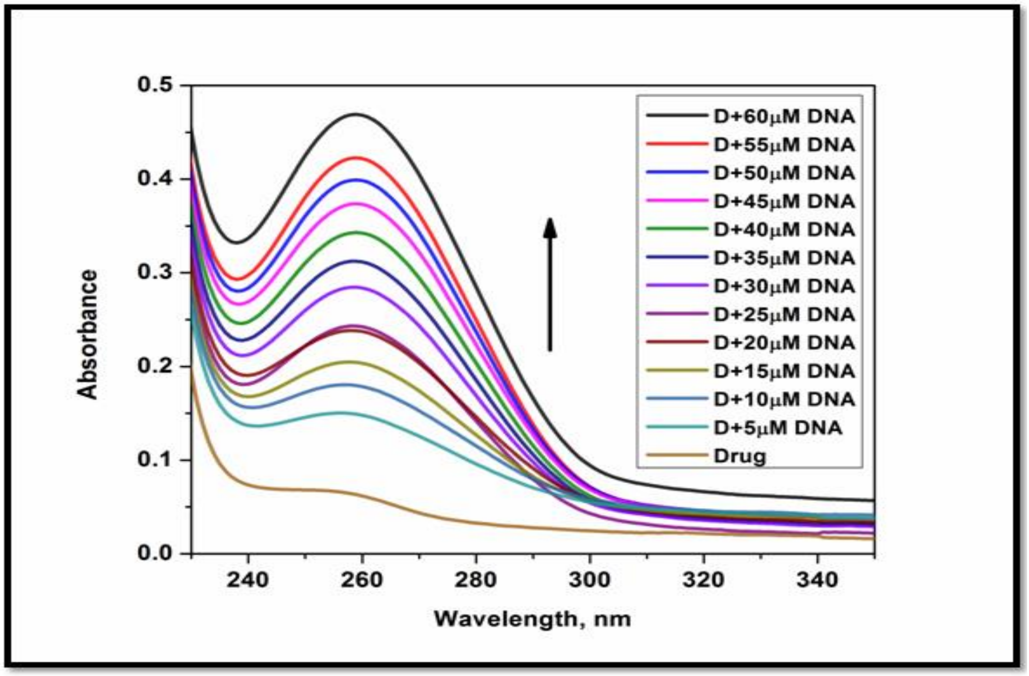

Figure S3. UV absorption spectra of vanadium pentoxide with increasing amounts of CT-DNA.

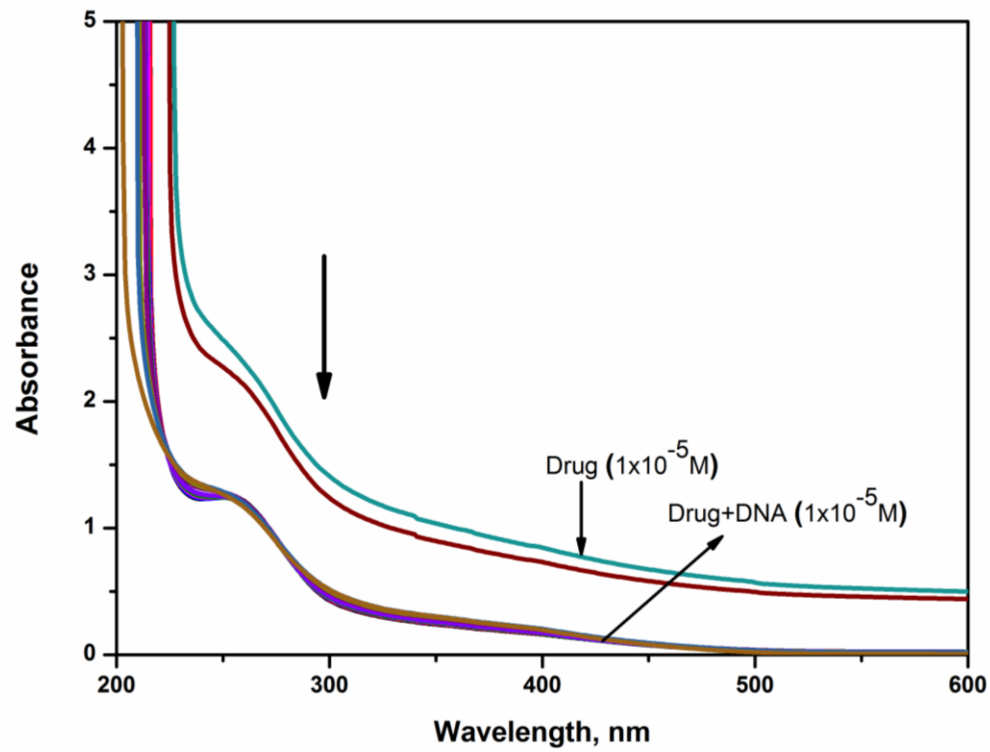

Figure S4. UV absorption spectra of ammonium metavanadate with increasing amounts of CT-DNA.

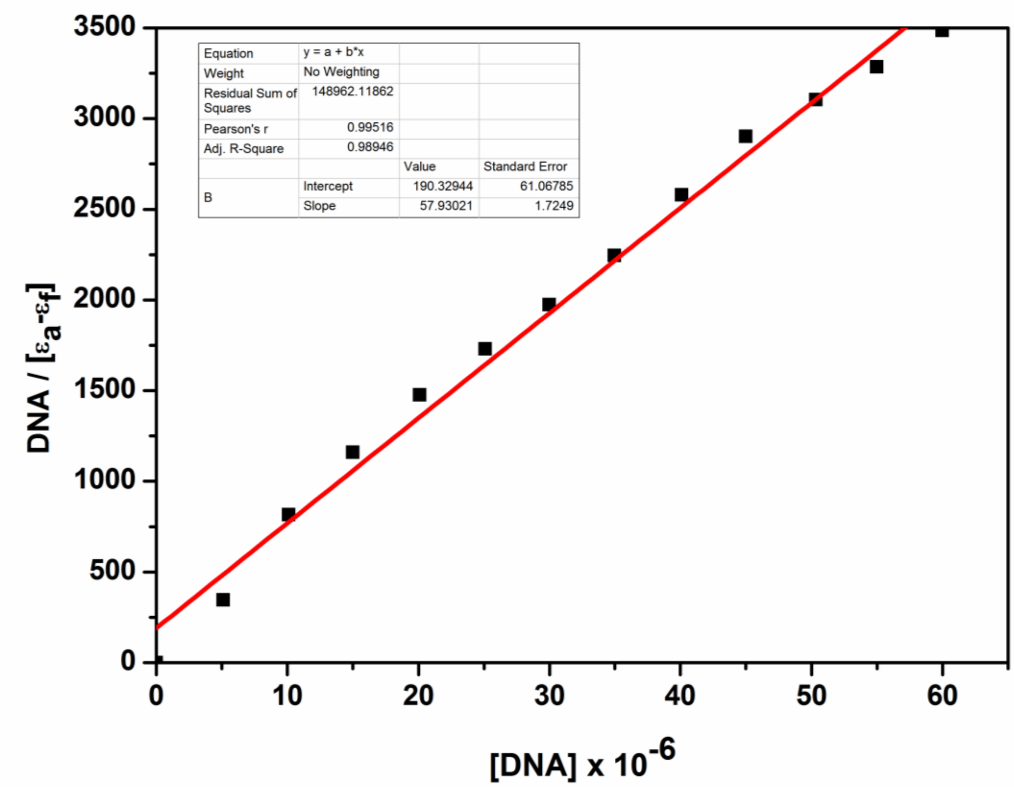

Figure S5. [DNA]/(ε_a-ε_f) *vs.* [DNA] linear plots of vanadium pentoxide.

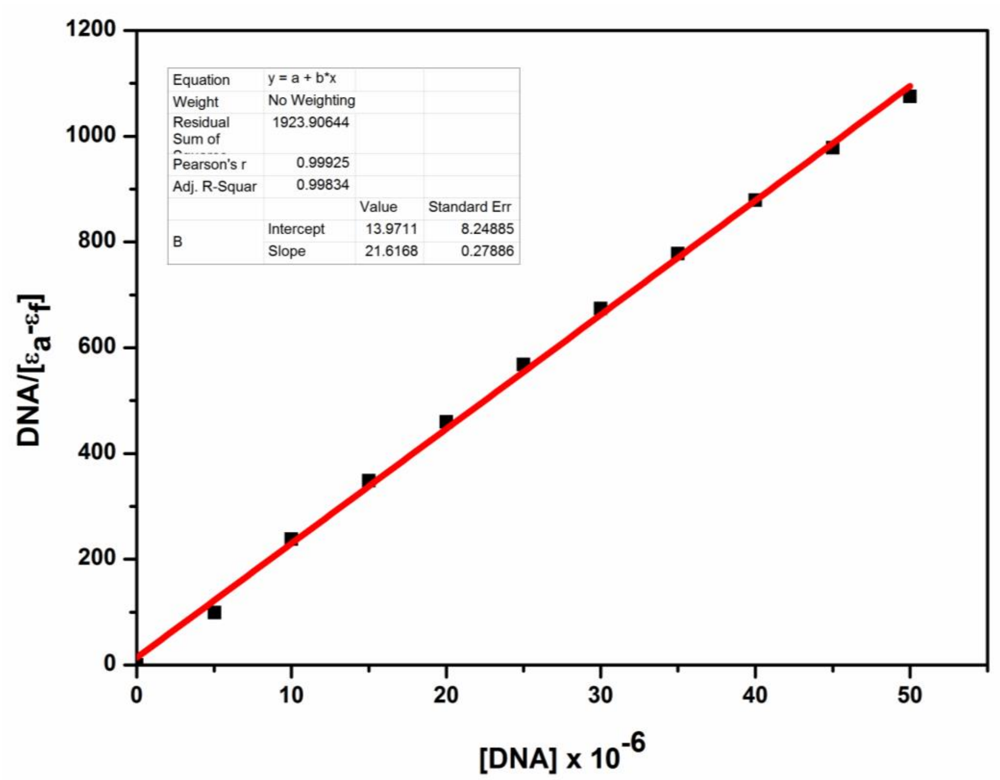

Figure S6. [DNA]/(ε_a-ε_f) *vs.* [DNA] linear plots of ammonium metavanadate.

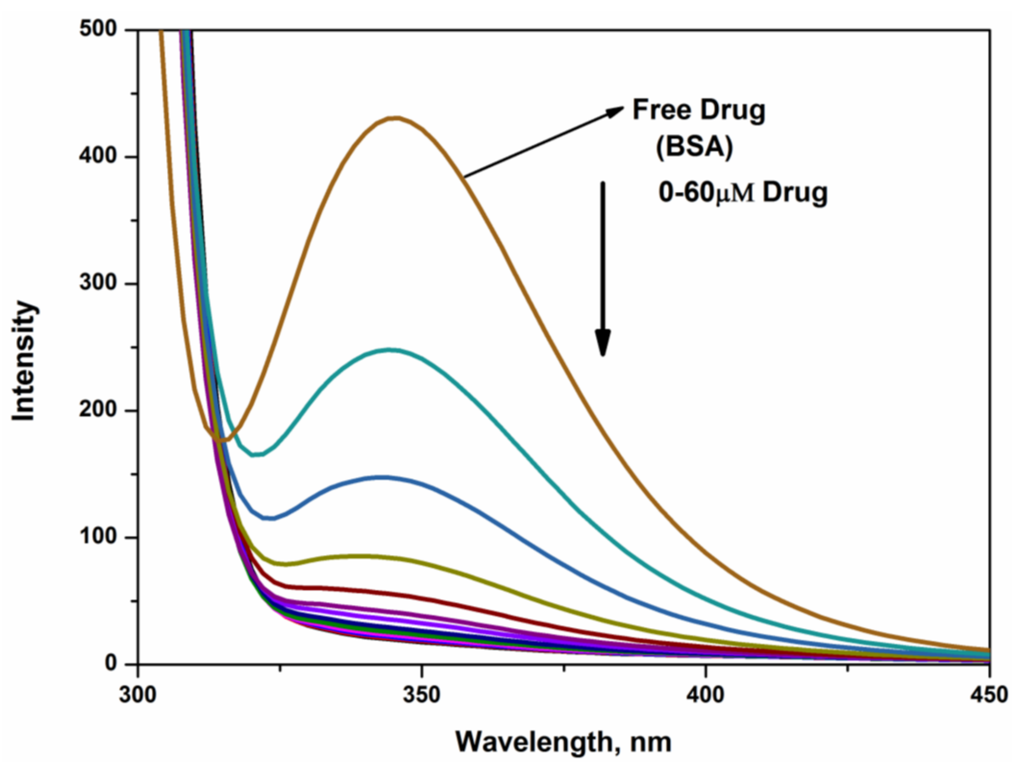

Figure S7. Emission spectra of BSA with increasing amounts of vanadium pentoxide.

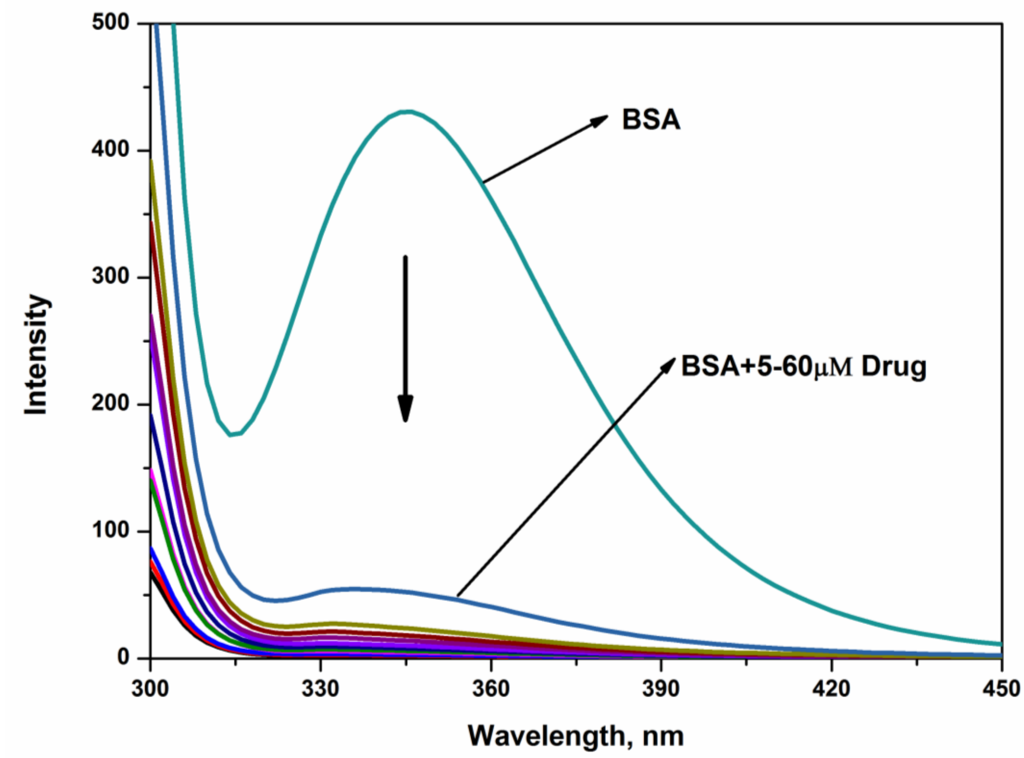

Figure S8. Emission spectra of BSA with increasing amounts of ammonium metavanadate.

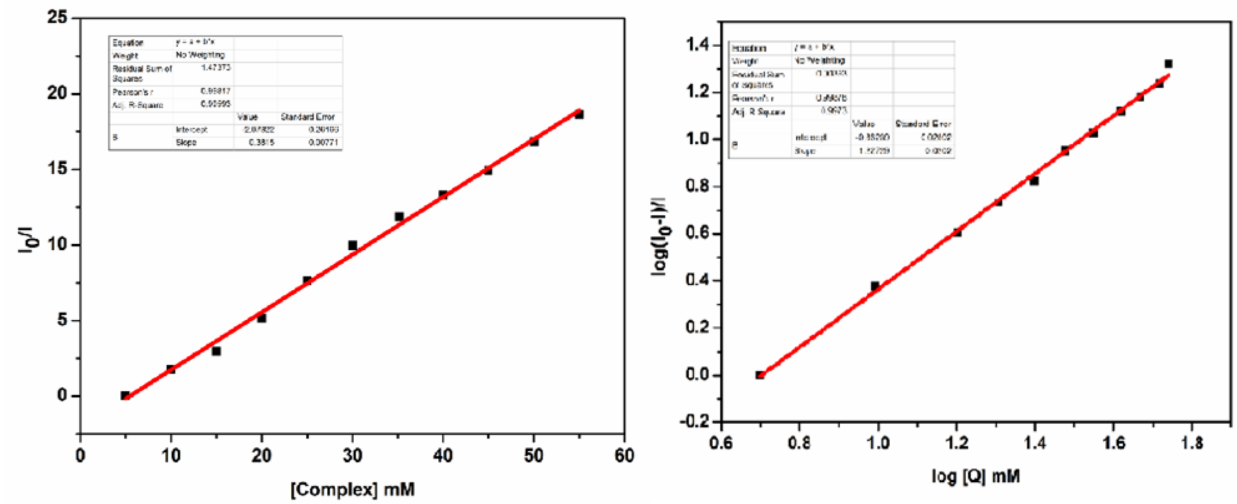

Figure S9. Stern-Volmer plot of vanadium pentoxide.

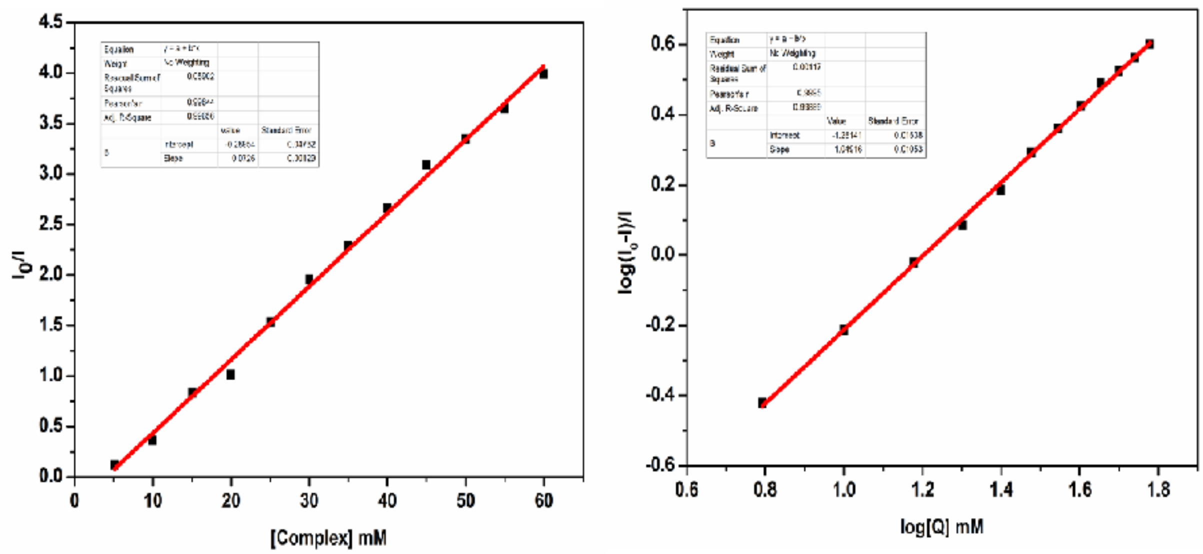

Figure S10. Stern-Volmer plot of ammonium metavanadate.