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MoS_2 quantum dots featured fluorescent biosensor for multiple detection of cancer

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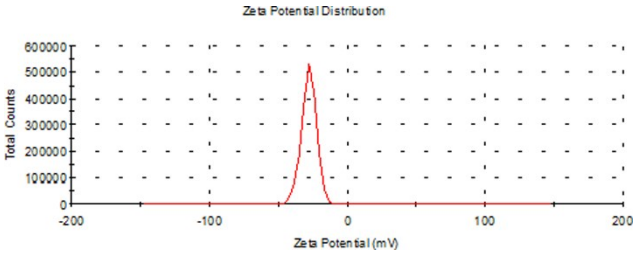

Fig. S1 Zeta potential of the obtained MoS_2 QDs.

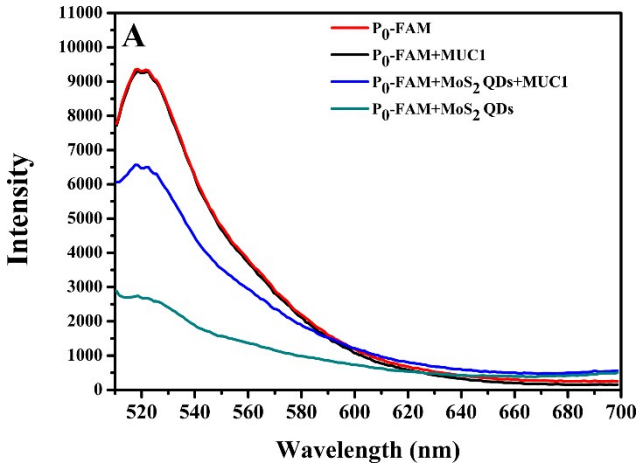

Fig. S2 FL spectrogram of the biosensor.

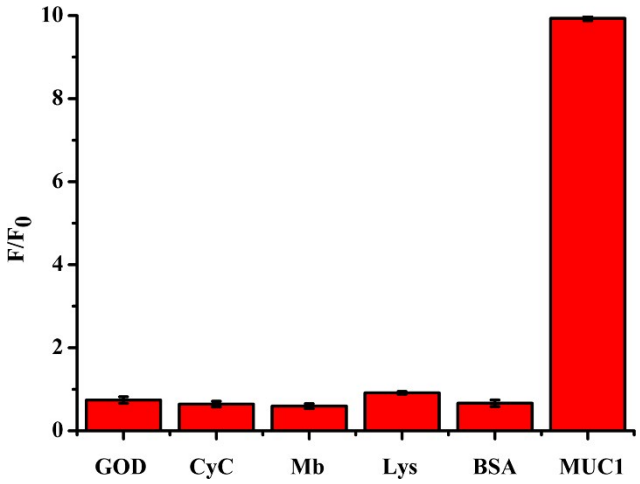

Fig. S3 The fluorescence response of MoS_2 QDs featured fluorescent biosensor to different protein in phosphate buffer solution (pH 7.4).

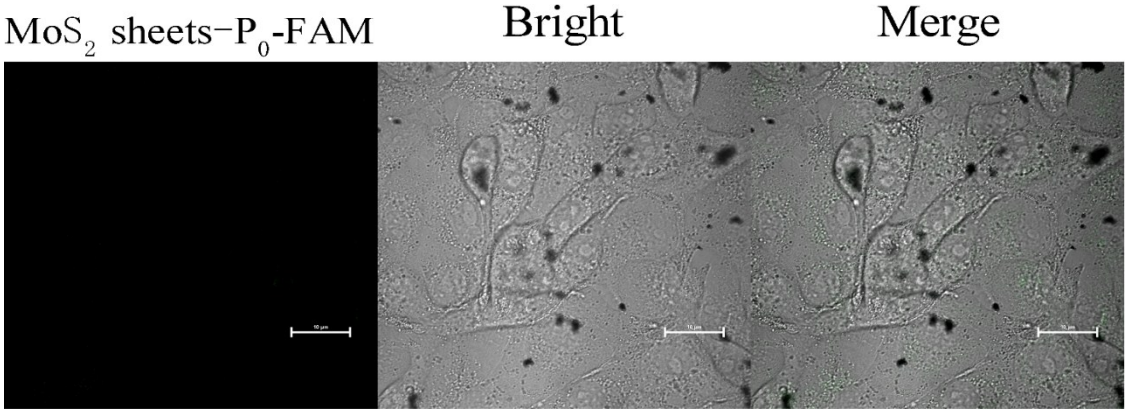

Fig. S4 Confocal fluorescence microphotograph of MCF-7 cells incubated with MoS2 sheets featured fluorescent biosensor for 1h.

Table S1. Comparison between current work and some relative researches for MUC1 detection.

Test method	Sensing range	Detection limit	Reference
EC	10^{-3}-1 μM	0.827 nM	1
ECL	10^{-3}-10^{3} pg/mL	0.62 fg/mL	2
ECL	10^{-3}-10^{4} pg/mL	0.23 fg/mL	3
Fluorescence	0.8-39.7 μM	250 nM	4
Fluorescence	0.04-10 μM	28 nM	5
Fluorescence	1 nM-10 μM	0.5 nM	This work

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