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## Highly Selective Rational Design of Peptide-Based Surface Plasmon Resonance Sensor for Direct Determination of 2,4,6-trinitrotoluene (TNT) Explosive

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### Highlights

- The TNT recognition peptide candidates were rationally designed and identified through the complementarity determining region (CDR) of anti-TNT monoclonal antibody. Surface Plasmon resonance (SPR) sensor functionalized with peptide candidates was utilized to screen the TNT binding peptide and characterize its sensitivity and selectivity to TNT explosive.

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