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Proximity ligation assay induced and DNAzyme powered DNA motor for fluorescent detection of thrombin

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ABSTRACT: A novel DNA motor for thrombin detection was described here based on proximity ligation assay (PLA) induced DNAzyme recycling cleavage. Fluorophore labeled DNA is modified on gold nanoparticles (AuNPs) and the fluorescent signal is quenched by AuNPs. The PLA between target thrombin and two aptamers induces the forming of Mg^{2+}-dependent