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Title (English) Evaluation and development of reagents and improved protocol for flow cytometry readout using <i>in situ</i> PLA	
Title (Swedish)	
Abstract The diagnosis of cancer today is obsolete, depending upon pattern recognition and non-quantifiable data. The time consuming diagnosis is often performed on biopsies, fixed using non standardised procedures, and leaves room for dubious results. The diagnosis is also invasive, exposing patients to risk of infections and discomfort due to the need of tissue samples. The knowledge about changes in protein expression levels related to cancer can instead be utilized to generate a new diagnostic tool. By adapting the <i>in situ</i> proximity ligation assay (<i>in situ</i> PLA) to cells in solution, it is possible to detect proteins, or protein interactions, within cells without the need for tissue samples. Since the method is both highly sensitive and specific, it delivers reliable results. In this report, the <i>in situ</i> PLA method for cells in solution is combined with flow cytometry readout. Hence, a new and less invasive diagnostic tool for cancer, delivering highly accurate high throughput single cell analysis, may be on the rise.	
Keywords <i>In situ</i> PLA, flow cytometry, diagnostic method, cancer,	
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