A Simple Method to Prepare Oligonucleotide-Conjugated Antibodies and Its Application in Multiplex Protein Detection in Single Cells

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Running title: Oligonucleotide-conjugated antibodies for protein detection

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Fig. S1. FPLC determination of number of oligonucleotides conjugated to the antibody. A Cy5-modified oligonucleotide was conjugated to a goat anti-IgY antibody, and without purification was analyzed by size-exclusion FPLC. The conjugated portion of oligonucleotide was represented by the peak at a retention volume of 11.8 mL; the unreacted portion of oligonucleotide was represented by the peak at a retention volume of 15.5 mL. The number of oligonucleotides conjugated to the antibody was estimated using a) the known ratio of oligonucleotide to antibody used in the conjugation reaction, and b) the areas under the two peaks (648 nm, blue curve); this number was found to be about 1.2. A number of peaks in the 648 nm trace were observed at higher retention volume; these may represent degradation products of the oligonucleotide.