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(54) **Title**: CYSTEINE ENGINEERED ANTIBODIES AND CONJUGATES

(57) **Abstract**: Cysteine engineered antibodies comprising a free cysteine amino acid in the heavy chain or light chain are prepared by mutagenizing a nucleic acid sequence of a parent antibody and replacing one or more amino acid residues by cysteine to encode the cysteine engineered antibody; expressing the cysteine engineered antibody; and isolating the cysteine engineered antibody. Certain highly reactive cysteine engineered antibodies were identified by the PHESELECTOR assay. Isolated cysteine engineered antibodies may be covalently attached to a capture label, a detection label, a drug moiety, or a solid support.