28AB-ISMS33 ADLib® System: The Avian Cell-based Antibody Display System with Human Repertoire

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The ADLib® (Autonomously Diversifying Library) system is a cell surface antibody display technology with unique antibody repertoire generated by gene conversion mechanism in chicken B cell lymphoma cell line, DT40. In the ADLib® system, the antigen-specific DT40 cells can be selected by magnetic activated and/or fluorescence activated cell sorting. We also developed the ADLib® axCELL method, which allows screening of antibodies against membrane proteins, and ADLib® Combo method which selects antibodies against new epitopes that are not covered by existing antibodies. Combination of different selection methods yields positive clones with higher affinity and specificity.

Recently we have developed fully human ADLib® system, in which genetically engineered DT40 cells express human IgG diversified by the gene conversion mechanisms. By increasing antibody repertoire further, the fully human ADLib® will offer a powerful alternative to the existing fully human mAb discovery platforms.