D5759

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§493.1278 Standard: Histocompatibility

(d)(6) Check each antibody screening by testing, at a minimum the following:

> **(d)(6)(i) A positive control material containing antibodies of the appropriate isotype for the assay.**
>
> **(d)(6)(ii) A negative control material.**

Interpretive **Guidelines §493.1278(d)(6)**

For serologic antibody screening, each tray must include at least one positive control serum previously shown to react with all lymphocytes and one negative control serum which has been demonstrated to be non-cytotoxic or lack antibody. Results are invalid if controls fail to react as expected. Cell viability in the negative control well at the time of reading must be sufficient to permit accurate interpretation of results. Viability should exceed 80%. The positive control must contain antibodies of the appropriate isotype (e.g., IgG and/or IgM). If the frozen cell tray is specific for Class II (HLA-DR or DQ) antibody testing, the laboratory must ensure B cells are being tested and have a mechanism to distinguish Class II antibodies from antibodies to Class I antigens that are also found on B cells.

Laboratories using ELISA and/or flow cytometric techniques must include one positive control serum and one negative control serum. Reagent controls for non-specific binding of antibody should be included with all ELISA testing. The negative control for flow cytometers should demonstrate non-reactivity and the positive control should be specific for HLA antigens. Again, the positive control for both techniques must contain antibodies of the appropriate isotype (i.e., IgG and/or IgM).

Verify that the laboratory uses a negative control and the appropriate isotype for its positive control.

Verify that the laboratory has established acceptability criteria for each control and for each method it uses.