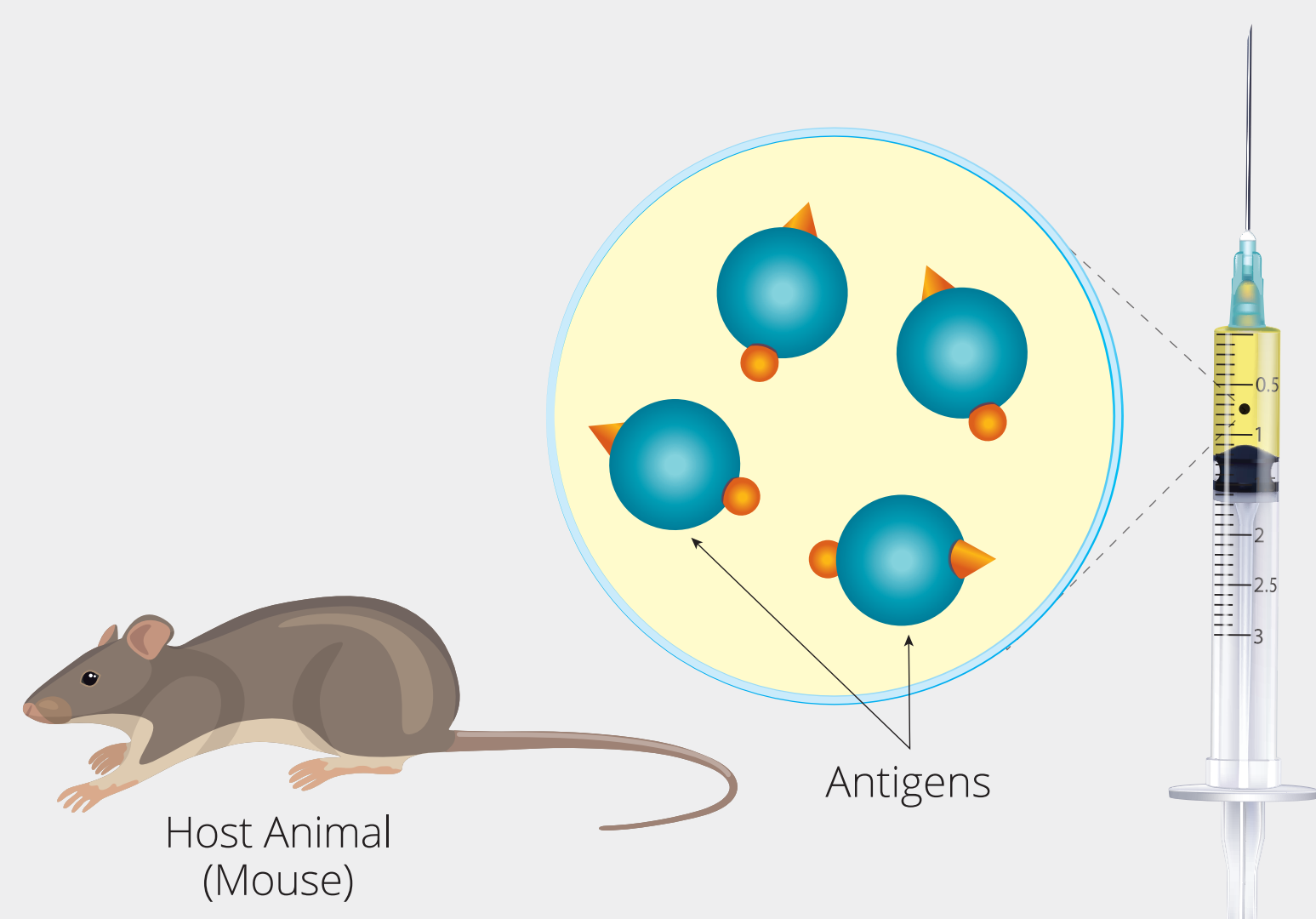
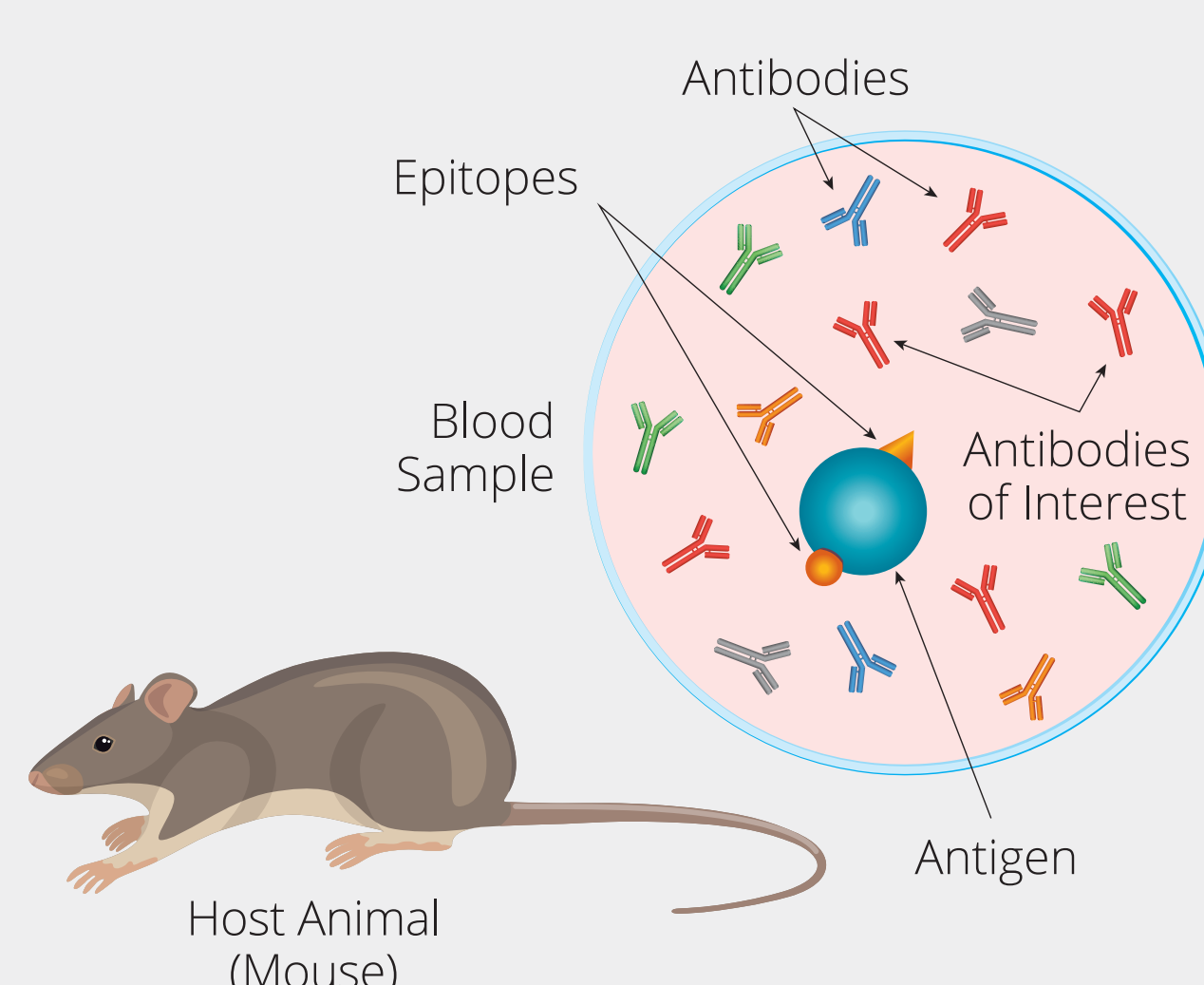


1 Generation of antibody producing B Cells in mice



A mouse is immunized against the target antigen of interest using, antigenic peptides, proteins or biological material that is prepared with a suitable adjuvant and used under a specified immunization protocol.

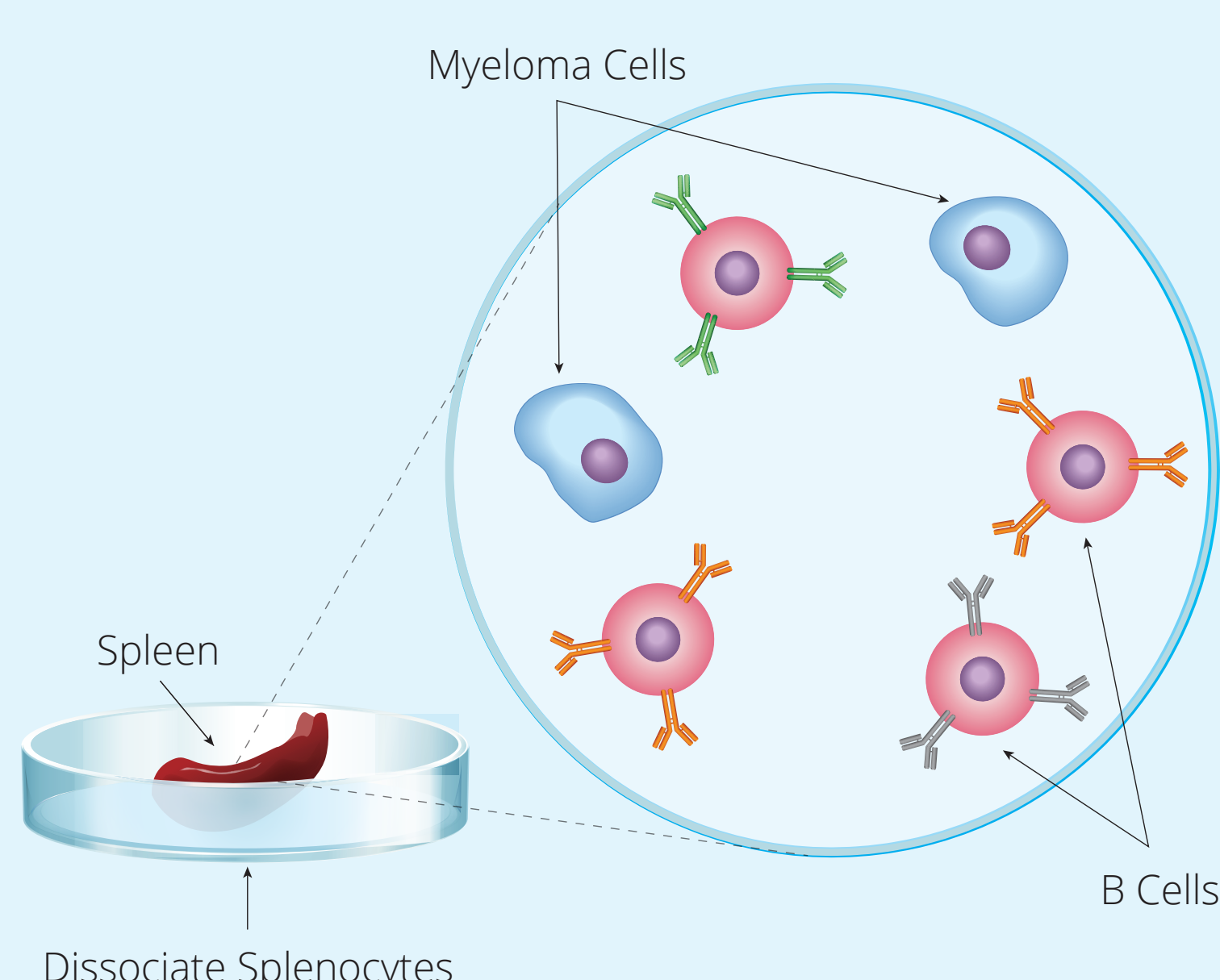
2 Is the mouse producing your antibodies of interest?



Test bleeds are collected and analyzed for the presence of antibodies targeting the antigen of interest.

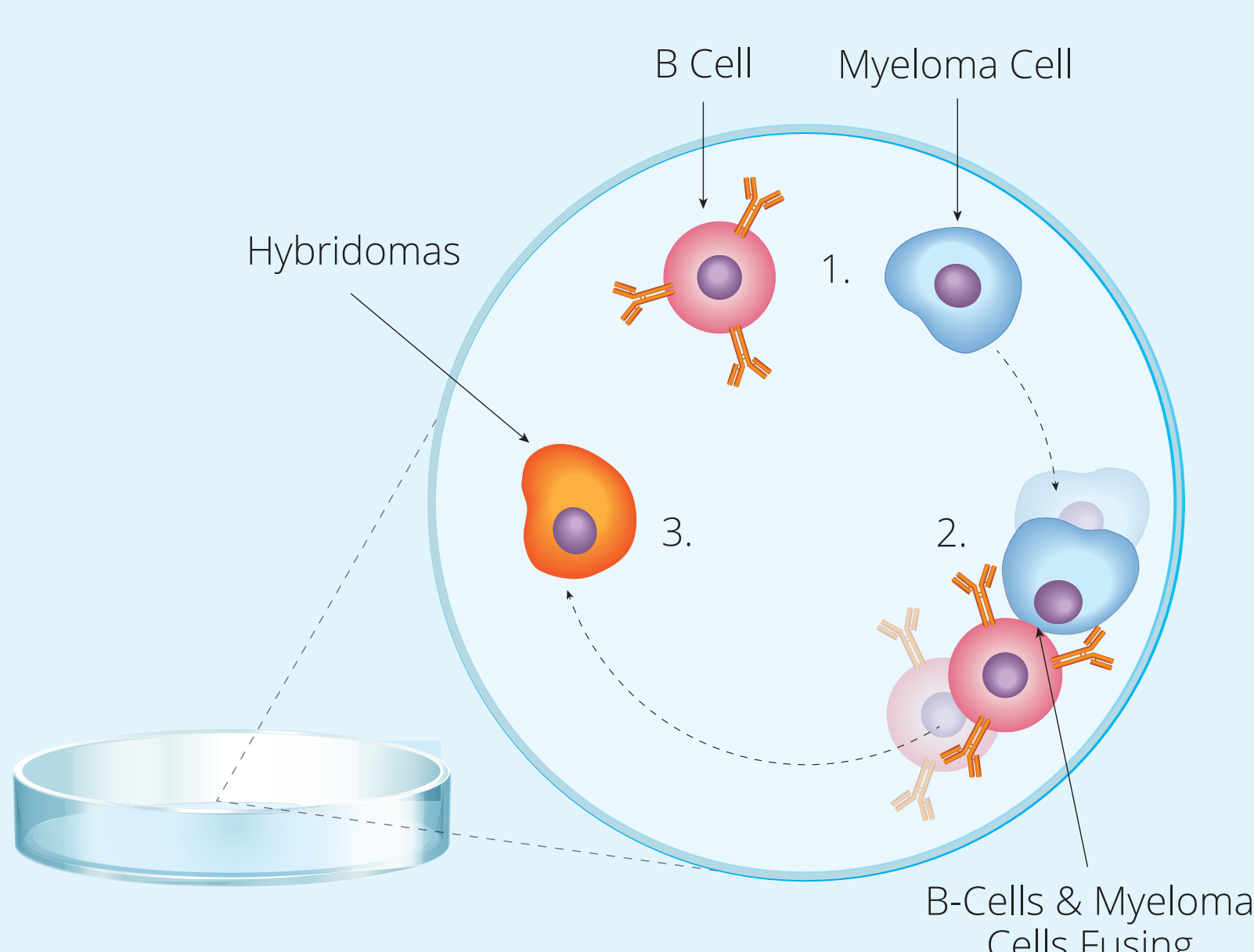


3 Dissociation of mouse spleen tissue releasing resident B cells and mixed with a specific ratio of immortal mouse myeloma cells



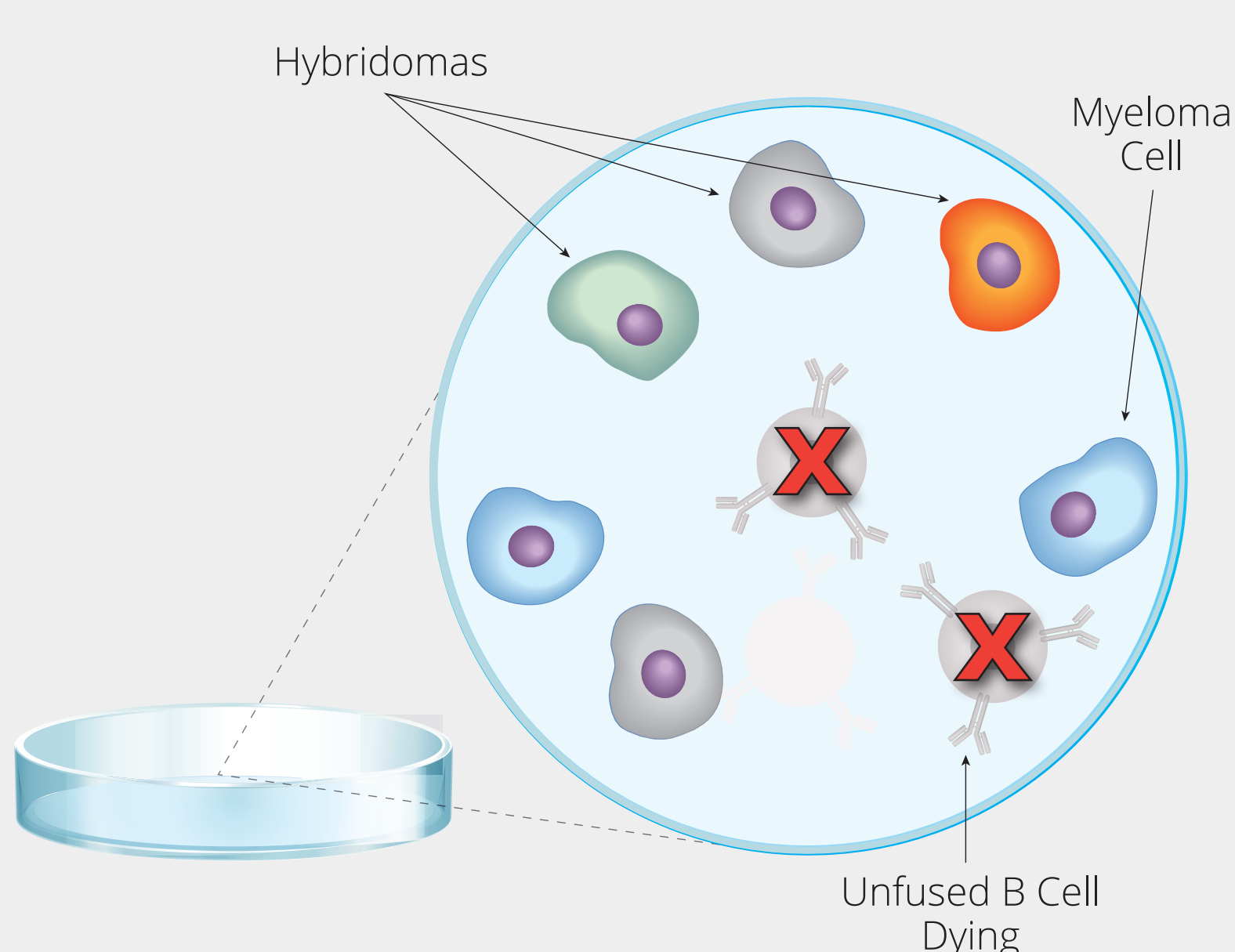
Mouse splenocytes are mixed with a specific mouse myeloma cell line.

4 Addition of Polyethylene Glycol (PEG)



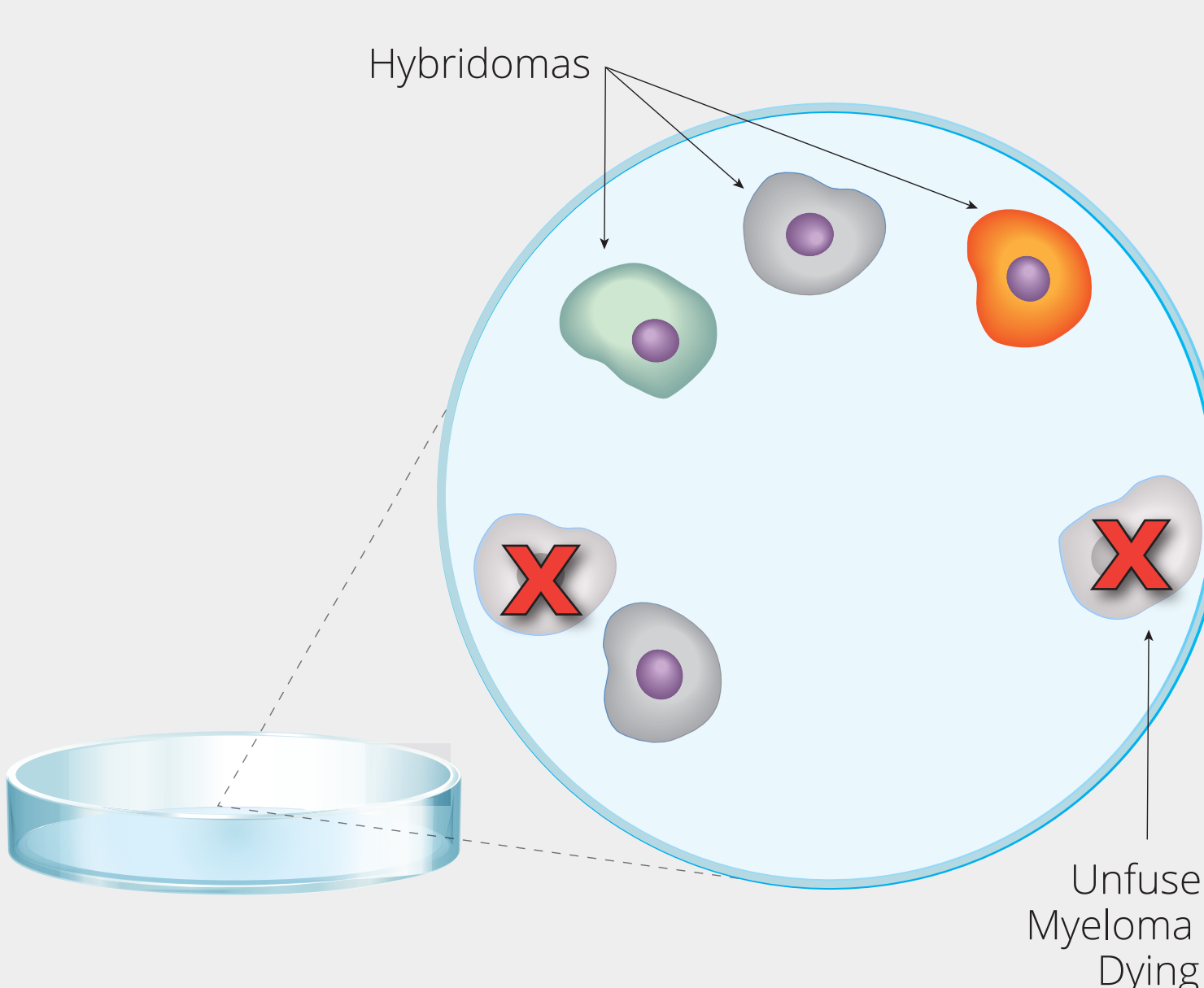
After PEG is added to the cell mixture, certain cells fuse to form hybridomas.

5 Selection of fused hybridoma cells from unfused B Cells



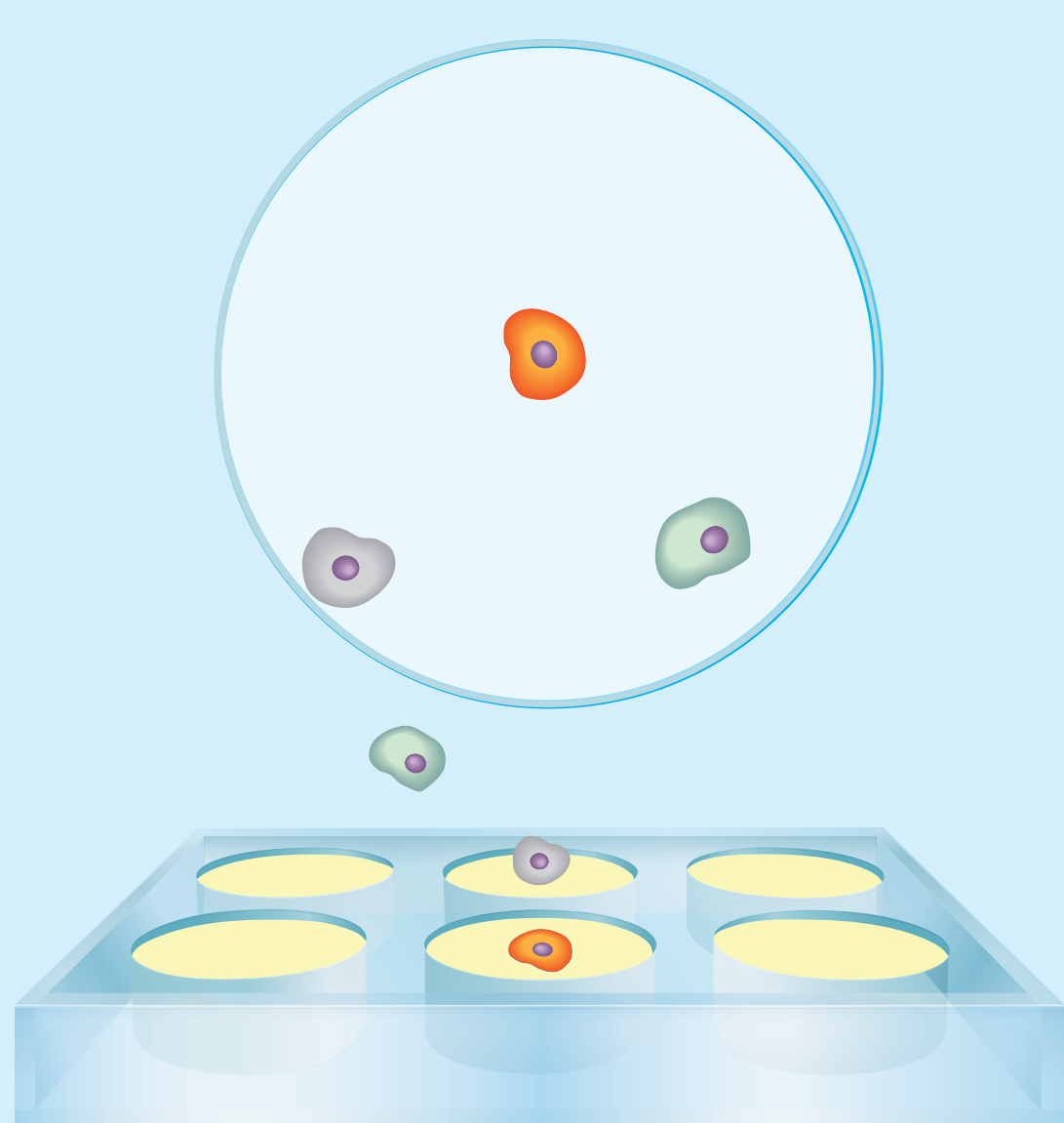
Unfused B Cells will not survive in culture, leaving only the hybridomas and the unfused myeloma cells.

6 Selection of fused hybridoma cells and unfused myeloma cells



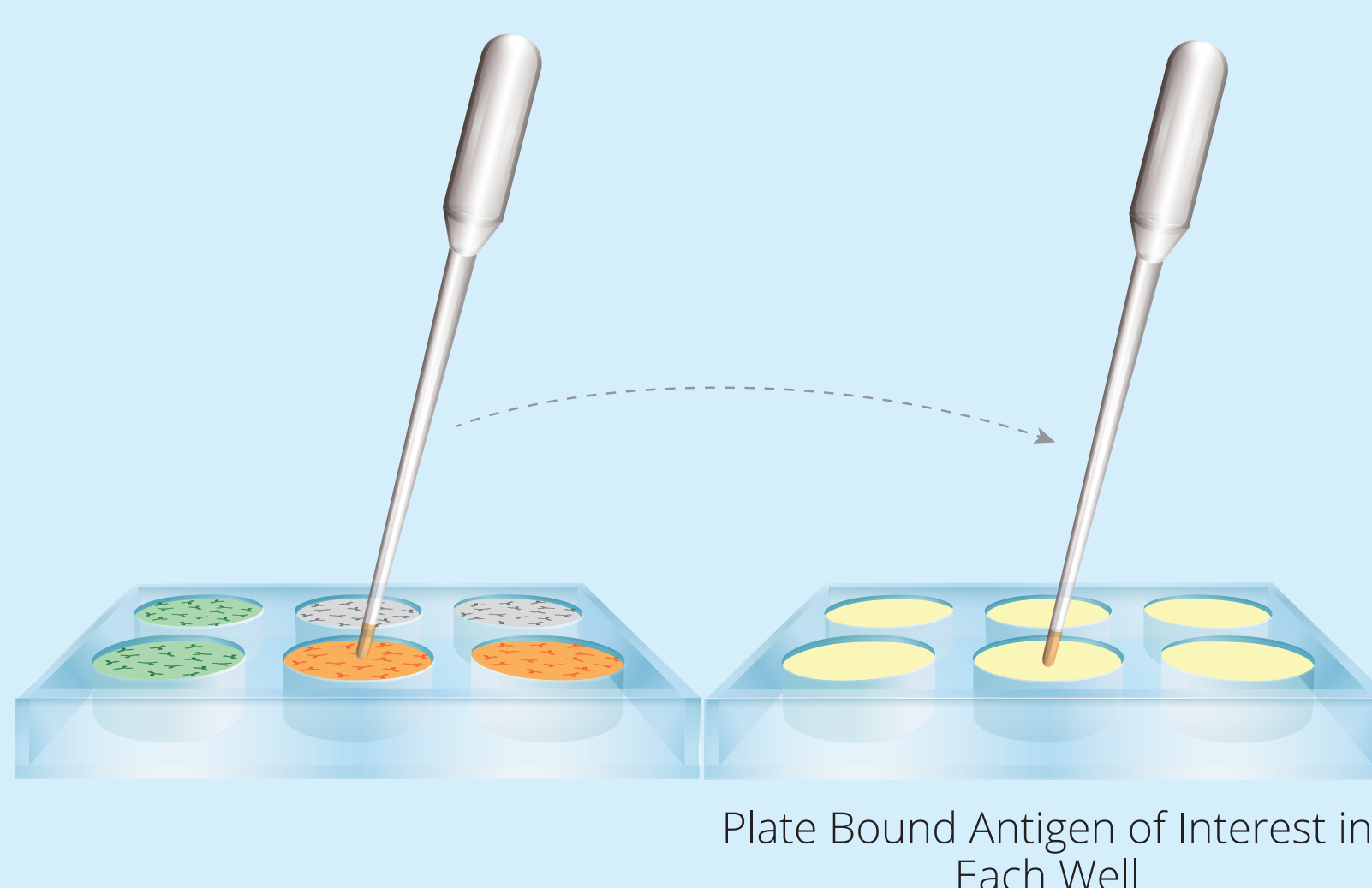
HAT Medium allows fused hybridomas to thrive, while unfused myeloma cells lack an enzyme that allows them to survive in HAT Medium

7 Clonal selection and expansion



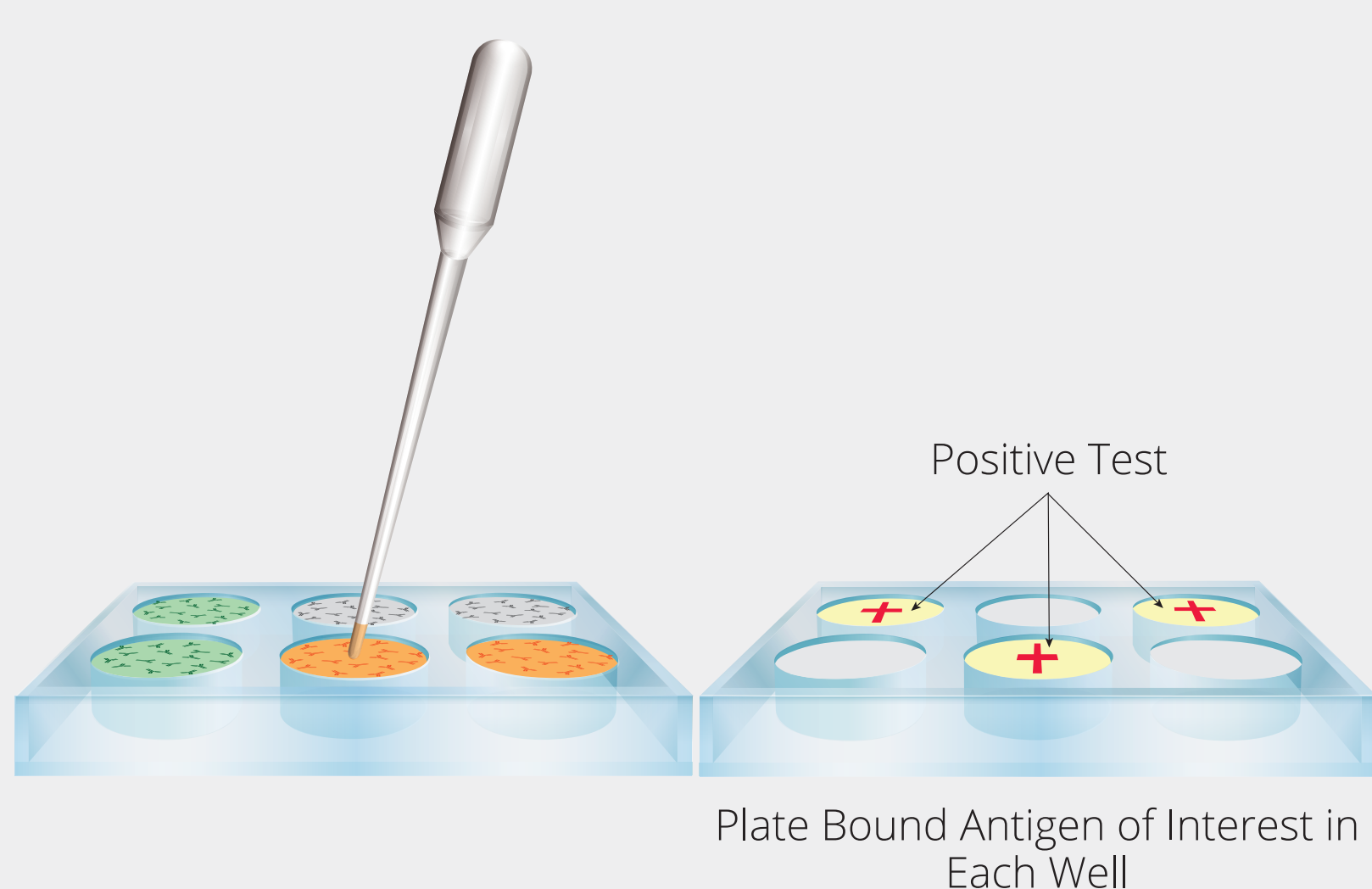
Hybridomas that survive are separated into single cell cultures, one cell per well.

8 Hybridoma screening



After weeks of cell culture expansion, the conditioned media is screened for the presence of secreted antibodies specific for the antigen of interest by Flow Cytometry or ELISA.

9 Positive hybridoma selection and expansion



Positive Screening by Flow Cytometry or ELISA result in Antigen specific Monoclonal Antibodies.

10 Antigen specific monoclonal antibodies are scaled up and stored for additional testing



Finally, Monoclonal antibodies are grown in large scale and then frozen for long term storage.