

### **Bone Marrow/Liver/Thymus (BLT) Mouse Model**

Another humanized mouse model frequently employed in HIV/AIDS research is the BLT (Bone marrow/Liver/Thymus) model. The BLT model is created via surgical transplantation of human fetal liver and thymus under the mouse kidney capsule accompanied with intravenous injection of autologous fetal liver hematopoietic stem cells (HSCs) derived from the same fetal liver donor. The BLT mouse model offers high engraftment efficacy, development of human hematopoietic cells in all lineages, and establishment of a strong human immune system; additionally, T-cells are educated in a human autologous thymus and exhibit HLA-restricted immune responses. However, the requirement for surgical procedures remains the major drawback of the BLT model.

#### **References:**

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