The Hu-M™ Mouse: A Novel Humanized Mouse Model

The Hu-M™ models are extensively validated for the presence of:

- Human CD19⁺ B cells
- Human CD3⁺ T cells
- Human CD4⁺ T_H cells
- Human CD8⁺ CTL cells
- Human CD56⁺ NK cells
- Human CD14⁺ Macrophages
- Human Hematopoietic Progenitors

Improved predictability of efficacy and safety of drugs for:

- Cancer
- Infectious Diseases
- Auto-immune Diseases
- Stem Cell Malignancies
- Cytokine Release Syndrome
- Graft vs. Host Disease (GvHD)
- Immunogenicity

- Reconstituted with pre-qualified hematopoietic stem cells leading to high chimerization.
- 8 color flow validation for human lymphocytes in the peripheral blood 10-15 weeks post engraftment.
- Customer tailored flow matrix available.
- Special pricing available for first time customers under exploratory study scheme.

The Hu-M™ Development Process: Generation of the Hu-M™ Mice

Hu-M™ CIEA NOG Mouse® in 12-14 weeks

Human Stem Cells  Neonatal CIEA NOG mouse®  Humanized CIEA NOG mouse®  Validation (8 color FACS)  Hu-M™ Mouse

The Hu-M™ Development Process: Validation of the Hu-M™ Mice

Humanization Profile in the Peripheral Blood of the Hu-M™ Mouse

T Cell Lymphopoiesis in the Spleen of the Hu-M™ Mouse

B Cell Lymphopoiesis in the Spleen of the Hu-M™ Mouse

Advantages over existing models:

- Reconstituted with validated human hematopoetic stem cells
- Robust human hematopoiesis
- Cost effective
- Cohorts standardized by humanization levels
- Available in larger cohorts

Serum was collected at pre-bleed, 3 hrs and 16 hrs post injection of 10 μg of Okt-3 mAb or IgG2a isotype control. Human cytokine levels of IL-2, TNF-α and IFN-γ were determined using a Luminex based cytokine detection assay.

In collaboration with Colorado State University, Fort Collins, CO

The Hu-M™ Platform: Fully Validated to Accelerate Your Pre-Clinical Research

**Hu-M™ AD Model**

Applications of the Hu-M™ AD platform
- Evaluating immune response against infectious agents or cancer
- Development of fully humanized antibodies against unique human targets

**Hu-M™ XENO Model**

Applications of the Hu-M™ xeno platform
- Development of a PDX/Humanized mouse platform
- Evaluation of immuno-modulatory agents against cancer

**Filovirus Glycoprotein (GP)-specific IgG Response in the Hu-M™ mice**

- MARV 1
- MARV 2
- MARV 3
- SUDV 1
- SUDV 2
- SUDV 3
- EBOV 1
- EBOV 2
- EBOV 3

In collaboration with USAMRIID.

**Infiltration of Human CD3⁺ T cells into MDA-231 Tumors in Hu-M™ xeno Mice**

- Tumor in NOG mice (Day 42) αCD3
- Tumor in Hu-M™ xeno mice (Day 42) αCD3

**Sales and General Inquires:**

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