

The NOG Portfolio

Extending the Limits of Engrafted Human Immune System Models

The development of animal models capable of mimicking human immune responses is crucial to study the pathophysiology of disease and to generate new therapeutic methodologies. Significant advances in immunology modeling have been made utilizing the super immune-deficient CIEA NOG mouse®, but the full application of engrafted human immune models depends upon overcoming some cross-species differences.

The NOG Portfolio includes key strains designed to overcome limitations in existing human immune system models.



NOG-EXL (hGM-CSF/hIL-3 NOG)

- NOG with expression of transgenic human GM-CSF and human IL3
- Used for hematopoietic stem cell engraftment that supports the development of an improved human immune system, with higher overall engraftment and higher levels of myeloid cell differentiation after human hematopoietic stem cell (HSC) engraftment
- Now available pre-engrafted with HSCs as **huNOG-EXL**. Available for immediate delivery at 12 weeks post-engraftment.

hIL-2 NOG

- Super immunodeficient NOG mouse expressing human IL-2 cytokine
- Predominant differentiation of human NK cells following human HSC engraftment

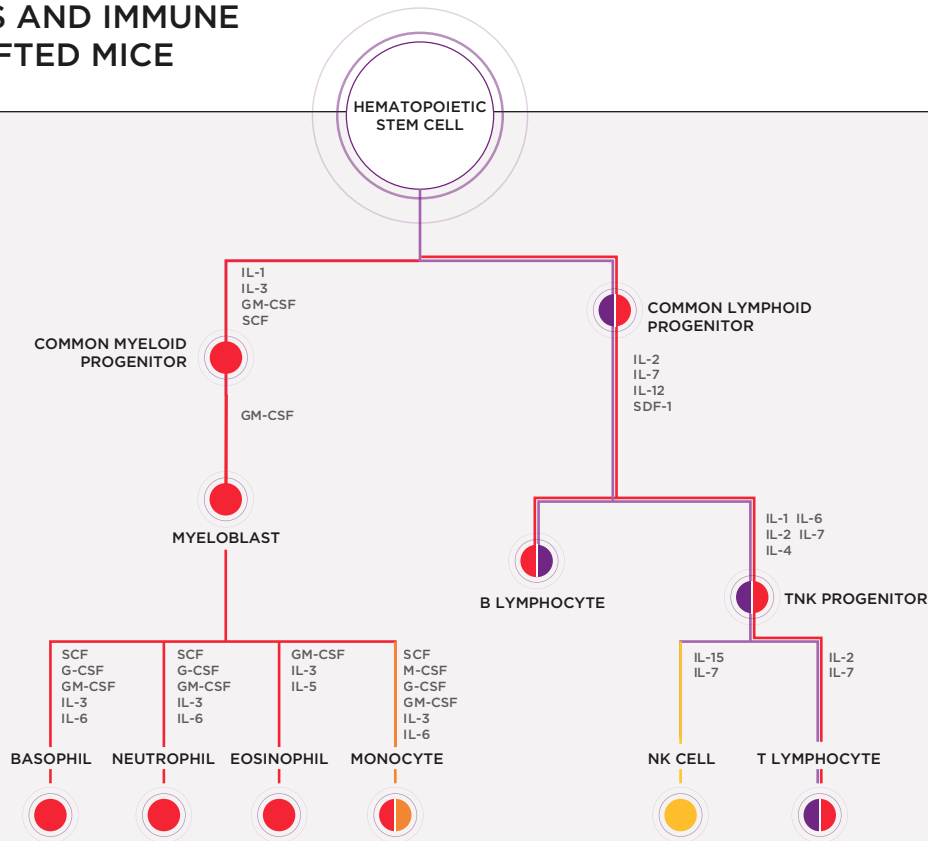
hIL-15 NOG

- Super immunodeficient NOG mouse expressing human IL-15 cytokine
- Predominant differentiation of human NK cells following human HSC engraftment compared to the base NOG mouse, but survival time is limited
- Engraftment and expansion of human NK cells following engraftment with CD56+ NK cells derived from PBMCs

hIL-6 NOG

- Super immunodeficient NOG mouse expressing human IL-6 cytokine
- Enhanced expansion of human monocytes following human HSC engraftment
- May be useful for study of tumor-infiltrating macrophages
- May be suitable host for hIL6-dependent acute myeloid leukemia (AML) primary tumor xenografts

HEMATOPOIESIS AND IMMUNE SYSTEM ENGRAFTED MICE



huNOG-EXL
(hGM-CSF/hIL3-NOG)



hIL-6 NOG



hIL-2 NOG, hIL-15 NOG



huNOG