

Contract Assay Services:

Your Hematopoietic Experts

Answer the questions important to your project with expertly designed and performed studies by the Contract Assay Services department of STEMCELL Technologies.

Contract Assay Services offers assays to study the effects of investigational small molecule compounds and biologics on the proliferation and differentiation of hematopoietic stem cells and progenitors. Our standardized in vitro colony-forming cell assays (CFC assays) are performed using human primary cells, as well as primary cells from mouse, rat, dog and monkey.

		HUMAN	MOUSE	RAT	DOG	MONKEY
In Vivo	HSC	✓	✓			
Multi-Lineage	LTC-IC	✓	✓			
	CFU-GEMM	✓	✓			✓
Erythroid	BFU-E	✓	✓	✓	✓	✓
	CFU-E	✓	✓			
Myeloid	CFU-GM	✓	✓	✓	✓	✓
	CFU-G	✓	✓			✓
	CFU-M	✓	✓			✓
Megakaryocyte	CFU-Mk	✓	✓			✓
Lymphoid	Pre-B		✓			

Studies designed and performed by Contract Assay Services can be used to achieve a variety of objectives, including:

- Testing for biosimilar or biobetter activity of cytokine therapeutics (G-CSF and EPO) and for direct effects of biologics on hematopoietic proliferation and differentiation.
- Customizing toxicity studies for non-human primates and other species with in vitro assays for erythroid, myeloid and megakaryocyte cell types.
- Predicting in vivo parameters such as maximum tolerated dose $(MTD)^1$ and maximal plasma concentration $(C_{max})^2$ with validated myeloid and megakaryocyte assays.
- 1. Pessina A, et al., Toxicol Sci 75: 355-367, 2003
- 2. Pessina A, et al., Toxicol In Vitro 23: 194-200, 2009



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