

CAMEO™-96

The Only Standardized, Methylcellulose Proliferation and Differentiation Colony-Forming Cell (CFC) Assay

Benefits of Using CAMEO™-96

- CAMEO™-96 is a dual endpoint assay that combines the power of a fully standardized ATP bioluminescence proliferation readout with traditional methylcellulose colony counting and differentiation using a 96-well plate format.
- Perform a miniaturized, methylcellulose CFU assay, allow the colonies to grow for 7-10 days, count and/or differentiate the colonies and complete the assay by measuring cell proliferation using ATP bioluminescence.
- Plotting colony counts against ATP bioluminescence to produce a correlation allowing the colony counts to be interpolated as standardized ATP concentrations (μM), thereby standardizing the CFC assay (see graph below).
- If required, no colony counting is necessary if the goal is to measure total cell proliferation in methylcellulose.
- Everything is included in the assay kit to setup CFC cultures, calibrate, standardize and measure cell proliferation, including the 96-well plates. Just prepare and add the cells.
- Two endpoints (proliferation and differentiation) for the price of one for up to 13 different lympho-hematopoietic populations from 8 species.
- CAMEO™-96 produces more scientific information than any CFC assay alone. Correlates with CAMEO™-4 (see graph below).
- CAMEO™-96 is also available without growth factors allowing either a background to be included or the flexibility to include other growth factors and/or cytokines.
- After colony counting, cell proliferation results are available in 30 minutes for a complete 96-well plate.
- Multiplexes with other assay readouts such as flow cytometry and gene expression analysis.
- Thanks to CAMEO™-96 assay standardization technology, results from different experiments can be reliably and directly compared over time without normalization.
- Easy to learn (1 day) and fast to use providing up to 24 samples/96-well plate assay kit. (Number of samples depends on number of replicate wells used. Unused wells will remain sterile for later experiments).

CAMEO™-96 is available for the following species:

- Human
- Non-human primate
- Horse
- Pig
- Sheep
- Dog
- Rat
- Mouse

CAMEO™-96 Assay Kit Contents

- CAMEO™-96 Master Mix
- ATP standard
- ATP controls
- ATP Enumeration Reagent
- Sterile, 96-well plates.
- Non-sterile, 96-well plates
- Sterile, adhesive foil covers.
- Instruction manual

High Quality, Superior Performance

BETTER ASSAYS → BETTER SCIENCE



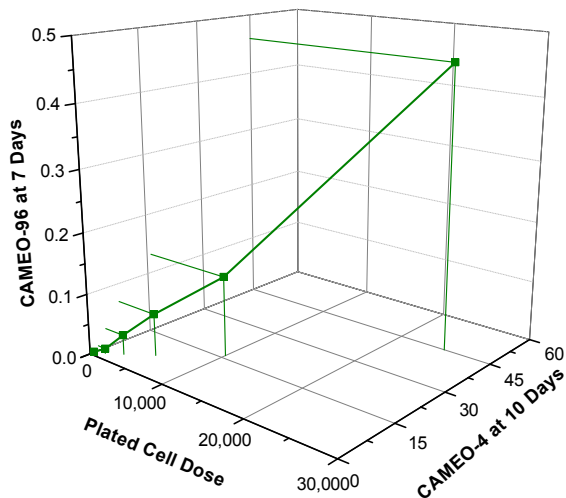
Assays You Can Trust
Innovative Expertise You Can Count On

CAMEO™-96

Cell Populations Detected with CAMEO™-96

Population	Colony Types Detected	Growth Factors Included
Base Master Mix	The flexibility to detect any hematopoietic cell population	No growth factors (can be added or used as control)
HPP-SP 1	Primitive, quiescent lympho-hematopoietic stem cell	IL-3, IL-6, SCF, TPO, Flt3-L
HPP-SP 2	Primitive, expanding lympho-hematopoietic stem cell. All cells below.	EPO, GM-CSF, IL-2, IL-3, IL6, IL7, SCF, TPO, Flt3-L
CFC-GEMM 1	All stem cells below + B, E, G & M, Mk	EPO, GM-CSF, IL-3, IL6, SCF, TPO, Flt3-L
CFC-GEMM 2	All stem cells below + B, E, G & M, Mk	EPO, GM-CSF, IL-3, IL6, SCF, TPO
CFC-GEM 1	GEM2 & 3 + B, E, G & M (no Mk)	EPO, GM-CSF, IL-3, IL-6, SCF
CFC-GEM 2	GEM3, B, E, G & M (no Mk)	EPO, GM-CSF, IL-3, SCF
BFU-E 1	BFU-E & CFU-E	EPO, IL-3, SCF
BFU-E 2	BFU-E & CFU-E	EPO (high dose)
GM-CFC 1	G & M	GM-CSF, IL-3, SCF
GM-CSF 3	G & M	GM-CSF
Mk-CFC 1	Mk	TPO, IL-3, SCF
B-CFC	B-lymphocyte progenitors	IL-7
T-CFC	T-lymphocyte progenitors	IL-2 (needs addition of mitogen or co-stimulator)

B = erythropoietic progenitor. G = granulocyte. M = macrophage. Mk = megakaryocyte.



Standardizing the CFC Assay with CAMEO™-96

Measuring Proliferation and Differentiation of Hematopoietic Cells in methylcellulose

