

Methylcellulose Colony-Forming Hematopoietic Cell Assays from Preferred Cell Systems™

Characteristics	<u>AllColonies:</u> <u>Traditional/Micro/Multi</u>	<u>ColonyGro™</u>	<u>CAMEO™-4</u>	<u>CAMEO™-96</u>
Uses	Basic and stem cell research; Veterinary research; Limited cellular therapy	Basic and stem cell research; Veterinary research; Limited cellular therapy	Basic and stem cell research; Veterinary research; Limited cellular therapy	Basic and stem cell research; Veterinary research; Limited cellular therapy; Limited hematotoxicity testing
Assay availability:	100mL/50mL/1 kit	100mL	50mL	1 kit
Number of samples:	44/50/Depends on number of replicates required ⁽¹⁾	44	50 (culture plates included)	Depends on number of replicates required ⁽¹⁾
Type of assay:	Methylcellulose - Clonal	Methylcellulose - Clonal	Methylcellulose - Clonal	Methylcellulose - Clonal
Assay format:	35mm Petri dish or 4-well Petri dish or 96-well plate	35mm Petri dish	4-well Petri dish	96-well plate
Cell functionality detected:	Differentiation or cell differentiation AND proliferation ⁽²⁾	Differentiation	Differentiation	Cell differentiation AND proliferation
Readout:	Microscopic or microscopic and plate reader ⁽²⁾	Microscopic	Microscopic	Microscopic and plate reader
Readout endpoint:	Colony counts and colony enumeration or with ATP bioluminescence ⁽²⁾	Colony counts and colony enumeration	Colony counts and colony enumeration	Colony counts and colony enumeration with ATP bioluminescence
Subjectivity:	Subjective/subjective/non-subjective	Subjective	Subjective	Subjective and non-subjective
Cell types detected:	Primitive lympho-hematopoietic stem cells	Stem, progenitor and/or precursor cells	Stem, progenitor and/or precursor cells	Stem and/or progenitor cells
Species:	Human; Primate; Dog; Rat;	Human; Primate;	Human; Primate;	Human; Primate;

	Mouse	Horse; Pig; Sheep; Dog; Rat; Mouse	Horse; Pig; Sheep; Dog; Rat; Mouse	Horse; Pig; Sheep; Dog; Rat; Mouse
MethoCult™ equivalent assays available:	No	Yes	Yes	Yes
Total culture volume required:	2.5mL/0.6mL/0.6mL ⁽¹⁾	2.5mL	0.6mL	0.6mL ⁽¹⁾
Number of replicates/ Culture:	2/4/6 or as many as necessary	2	4	6 or as many as necessary
Volume/Culture:	1mL/0.1mL/0.1mL	1mL	0.1mL	0.1mL
Cell culture time: ⁽³⁾	6-10 days	2-12 days	2-9 days	4-9 days
Instrument calibration:	Only for AllColonies™ Multi	No	No	Yes
Standardized assay:	Only for AllColonies™ Multi	No	No	Yes
Proficiency testing incorporated in assay:	Only for Allcolonies™ Multi	No	No	Yes
Measurement Assurance:	Only for Allcolonies™ Multi	No	No	Yes
Validation ⁽⁴⁾ :	Only for Allcolonies™ Multi	No	No	Yes

(1) The culture volume depends upon the number of replicates required. The suggested number of replicates is 6, but can be any number of replicates.

(2) Only available with AllColonies™ Multi.

(3) Culture time depends on the cell population and species being detected.

(4) Validated according to FDA Bioanalytical Method Validation Guidelines. Can be validated in-house.