

HALO®-96 PREP

Assays to Detect Proliferation, Self-Renewal and Expansion Potential of Primitive Stem Cells

HALO®-96 PREP APPLICATIONS

- Designed specifically for the primitive, lymphohematopoietic stem cell population, HPP-SP (High Proliferative Potential - Stem and Progenitor Cell)
- Uses secondary re-plating technology to substantiate the presence of primitive stem cells.
- Experimental transplantation model.
- In vivo to in vitro assays.
- Gene targeting assays.

SPECIES

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

ASSAYS DETECT:

Primitive Stem Cells

- HPP-SP 1
 stimulated with
 5 growth factors
 and cytokines to
 "prime" quiescent
 stem cells into cell
 cycle.
- HPP-SP 2
 stimulated with
 10 growth factors
 and cytokines to
 expand "primed"
 stem cells using
 secondary
 re-plating
 technology.

WHY USE HALO®-96 PREP FOR YOUR RESEARCH

- The only assay that can detect and measure proliferation, self-renewal and expansion potential of primitive lympho-hematopoietic stem cells (HPP-SP).
- Distinguish between Quiescent and proliferating primitive stem cells.
- Used to "prime" primitive stem cells out of quiescence and into cell cycle.
- HALO® utilizes Suspension Expansion Culture (SEC) and Bioluminomics™ Technology.
- Multiplex HALO®-96 PREP to obtain even more information from the cell sample.

FAST and EASY BIOLUMINOMICS™ TECHNOLOGY

- Incorporates an ATP-based luciferin/luciferase bioluminescence signal.
- Measures intracellular ATP (iATP) (the cell's energy source) to determine viability, cellular functionality, proliferation/cytotoxicity and cell number all of which are proportional to the iATP concentration.
- Most sensitive non-radioactive signal detection readout available.
- Detect as few as 20-25 cells.
- Single addition reagent and results can be measured after 10 minutes.
- Non-subjective, instrument-based and quantitative assay system.
- Complete assay kit; includes everything needed to calibrate, standardize and, if necessary, validate the assay.
- Easily compare results over time. Always reliable and reproducible results with very low variation.
- Results in 4-5 days (depending on species).
- Easy to learn, fast to use and cheaper than the methylcellulose CFC assay.

Kit Contents:

- HALO® Master Mix
- ATP standard
- ATP controls
- ATP Monitoring Reagent
- Sterile, 96-well plates.
- Non-sterile, 96-well plates
- Sterile, adhesive foil covers.
- Instruction manual



Assays You Can Trust Innovative Expertise You Can Count On