

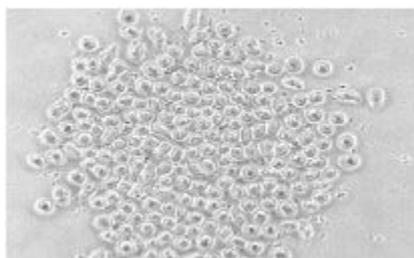
## PowerStem HPSC

PowerStem HPSC is a specialized serum-free medium for the cultivation and expansion of human hematopoietic stem cells (HPSC) and cells of myeloid lineage in suspension culture. Hematopoietic stem cells are CD34+, which are the earliest hematopoietic stem cells identifiable in bone marrow, peripheral blood and neonatal cord blood. By adding one or more differentiation factors or changing culturing conditions, HPSC can be induced to differentiate into different types of hematopoietic lineage cells.

PowerStem HPSC basal medium, PowerStem HPSC growth supplement and PowerStem HPSC cytokine supplement are guaranteed stable for 12 months when properly stored. PowerStem HPSC complete medium (basal + supplements) is stable for 3 months when stored in the dark at 2-8° C. We do not recommend using the complete medium beyond 3 months.

### Composition

PowerStem HPSC contains purified proteins, lipids, salts, amino acids, trace elements, attachment factors, hormones and growth factors in an optimized formulation. PowerStem HPSC is fully defined and contains no FBS.



Hematopoietic stem cells from neonatal cord blood in PowerStem HPSC

### Suitability

Serum-free cultivation and expansion of human hematopoietic CD34+ stem cells from bone marrow, peripheral blood and neonatal cord blood.

Please note: For research use only, not for therapeutic or diagnostic use.

### Special advantages

PowerStem HPSC allows the cultivation and expansion of human hematopoietic CD34+ stem cells and cells of myeloid lineage under serum-free conditions. It is fully defined in its composition and thus enables constant and comparable experimental conditions with easily reproducible results. The hematopoietic stem cells can be cultivated without stromal cells, they show a high proliferation rate and largely retain their undifferentiated state. By adding specific differentiation factors, hematopoietic cells can be differentiated in vitro to different types of hematopoietic lineage cells.

### Instructions for use

Detailed instructions will be provided with the accompanying datasheet for PowerStem HPSC. In addition, instructions for use can also be found at [www.pan-biotech.com](http://www.pan-biotech.com).

### References

Horschitz S et al. (2010) Generation of neuronal cells from human peripheral blood mononuclear cells. *Neuro Report* 21:185.

PowerStem HPSC <sub>3</sub>	100 ml Kit 500 ml Kit	P04-77410K P04-77450K
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(1) usually on stock, (2) minimum order 10 l, (3) available on request