

HPL Supplement - Heparin

Product Description

Heparin is an anti-coagulant that prevents fibrin formation in human Platelet Lysate (hPL) and the clotting of the complete cell culture medium during cell expansion.

Recommended for

Use with LSP [Human Platelet Lysate Solution](#) which requires the addition of heparin to the complete, cell culture medium.

Formats

Choose from either:

1. [Heparin](#) - Standard animal-derived heparin - HSUP-001M.
2. [Xeno-free heparin](#) - Animal component-free heparin, fully synthetic and preservative-free - HSUP-XF-001M.

Product Information

Product Code	Product Description	Pack Size
HSUP-001M	HPL Supplement - Heparin (5.000 U/mL)	0.5 mL
HSUP-XF-001M	HPL Supplement - Xeno-free heparin (12.5 mg/mL)	0.5 mL

Heparin should be used with the following [Human Platelet Lysate Solution](#) and [Human Platelet Lysate-Customised](#) products:

Product Code	Product Description	Pack Size
PLS-001K	Human Platelet Lysate - Research Grade	25 mL
PLS-001B	Human Platelet Lysate - Research Grade	100 mL
PLS-001A	Human Platelet Lysate - Research Grade	500 mL
PLS-002B-BAG-GMP	Human Platelet Lysate - GMP Grade (cryobag)	100 mL
PLS-002B-GMP	Human Platelet Lysate - GMP Grade	100 mL
PLS-002A-GMP	Human Platelet Lysate - GMP Grade	500 mL
PLS-002C-GMP-GI	Human Platelet Lysate - GMP Clinical Grade	50 mL
PLS-002B-GMP-GI	Human Platelet Lysate - GMP Clinical Grade	100 mL
PLS-002A-GMP-GI	Human Platelet Lysate - GMP Clinical Grade	500 mL
HPL-CUS-100B	Human Platelet Lysate-Customised	100 mL
HPL-CUS-100A	Human Platelet Lysate-Customised	500 mL

Protocol: How do I use heparin with hPL solution?

1. Thaw [Human Platelet Lysate Solution](#) overnight at 4°C or for 1 hour in a 37°C water bath.
2. Prepare complete MSC culture medium by adding [Human Platelet Lysate Solution](#) to basal medium (i.e. Dulbecco's Modified Eagles Medium-Low Glucose; DMEM-LG) with 2 mM L-glutamine and 100 U/mL Penicillin/streptomycin as final concentration.
3. hPL shows optimal growth of MSC at 5% (v/v). However, for higher cell proliferation rates, it is recommended to use 10% (v/v) of hPL.
4. We recommend seeding MSCs at approximately $3 \times 10^3 \sim 6 \times 10^3$ per cm^2 .
5. To avoid coagulation of the complete MSC culture medium, add [Heparin](#) at a concentration of 2 U/mL [Heparin](#), or 0.024 mg/mL [Xeno-Free Heparin](#). DO NOT add the Heparin directly to the Human Platelet Lysate Solution.

NOTE: Human Platelet Lysate FD and Human Platelet Lysate XF DO NOT require the addition of heparin as they are fibrinogen depleted products.

6. Complete MSC culture medium can be stored at 4°C and is stable for approximately four weeks.

Shelf life

Shelf life is 5 years for standard heparin, and 3 years for xeno-free heparin from the date of manufacture.

Storage & Handling

Recommended storage temperature is +4°C.

Shipping

Both standard heparin and xeno-free heparin can be shipped at room temperature.

Disclaimer

For research use only. Not for therapeutic or diagnostic use.

Support

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