CAPTIVATE BIO™

HUMAN PLATELET LYSATE

Frequently Asked Questions

1. **What is human platelet lysate (HPL)?** HPL is a growth factor-rich cell culture supplement derived from healthy donor human platelets. Multiple donor units are pooled during manufacturing to minimize lot-to-lot variability. Typically, HPL is produced from expired platelets that have been stored in frozen conditions no later than 5-7 days post-collection. HPL is a substitute cell culture supplement for fetal bovine serum in basic cell culture and cell therapy applications. HPL contains large quantities of growth factors and cytokines necessary for cell expansion.

2. **What is the intended use for HPL?** Large-scale expansion of cells including MSCs, T-cells, hematopoietic stem cells, iPSCs, tumor cells, and fibroblasts.

3. **What is the difference between research-grade and clinical-grade HPL?** Both grades are manufactured under the same conditions and follow the same protocols. Depending on the manufacturer, each grade of HPL may have different testing and batch record documentation. Please refer to the product's Certificate of Analysis or contact our Customer Service team for additional information.

4. **Is it possible to add too much HPL to my cultures?** Yes, with HPL it is possible to add too much to your cultures. We've seen that HPL can slow the growth of MSCs at high concentrations. Standard protocols suggest adding 5% concentration. However, we recommend titrating anywhere between 2-10% in order to maximize cell growth and narrow in on the best concentration for your cultures.

5. **Do you offer virus inactivated HPL?** Yes. We offer pathogen-inactivated and gamma-irradiated HPL.

6. **What type of quality testing is available?** In addition to the standard testing of donor material for infectious diseases, every lot of human platelet lysate is tested for biochemical properties, bacterial and fungal contamination, mycoplasma, endotoxin, and cell growth.

7. **How should I store HPL?** HPL should be stored at -20°C until use. Exposing HPL to repeated temperature changes is not recommended. We do recommend thawing the HPL upon receipt and preparing aliquots which should be stored at -20°C or colder. When ready for use, please store the HPL at 4°C and using within 2 weeks. For cell culture media supplemented with HPL, we recommend storing at 4°C and use within two weeks. For long term storage, once aliquoted, supplemented media can be stored at -80°C until use.

8. **Do we filter the HPL before supplementing our cell culture medium?** No, we do not recommend filtering HPL or HPL supplemented medium.

9. **What Is the best method for thawing our HPL?** We recommend thawing HPL in the refrigerator overnight ahead of use or in a properly maintained 37°C water bath.

   Recommended water bath thawing procedure:
   1. Remove the HPL bottle from the freezer and allow to acclimate to refrigerator temperature for approximately 10-15 minutes.
   2. Fill the water-bath with sufficient water so that the HPL bottle is immersed up to its fill line. Do not completely submerge or immerse bottle beyond its cap thread.
   3. Place each bottle into the 37° water bath.
   4. Gently swirl or shake the bottle every 10 minutes until the HPL is completely thawed.
   5. Once thawed, swirl the HPL bottle and store at 2-8°C until ready for use.

10. **Do we need to add Heparin when using HPL?** Heparin is an anti-coagulant used to decrease clotting and/or prevent clots in blood products. We offer several grades of HPL including heparin-free HPL and HPL that does require Heparin. Currently, we offer PLTMax® and ELAREM™ Prime which require the addition of Heparin.

For additional product or technical information, please visit www.captivatebio.com, email orders@captivatebio.com, or call customer service at (617) 607-4017.