

Human Platelet Lysate
with the Longest
Clinical Experience!
EVOLVING WITH YOU!

f you haven't switched to a 100% xeno-free media supplement, now is the time to try the BEST! **PLTGold**® contains all the growth factors and proteins that maximize cell growth without the need to worry about animal-based supplements or lot-to-lot variability. Other xeno-free hPLs compromise performance and can't be completely

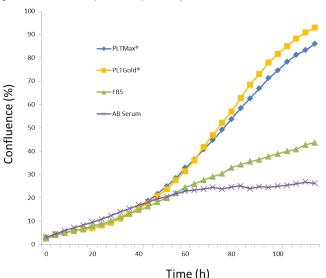
clot free. Not anymore. With PLTGold® there is no clot formation and no need for heparin. It is available in research and clinical GMP grades with no trade-offs.

PLTGold® is an evolutionary step up in human platelet lysate. It was derived from **PLTMax®**, which is our original product and was the first human platelet lysate on the market. Born in a clinical lab, our products have been used in more than 50 Phase I, II, and III clinical trials for more than a decade. Our partners rely on us to provide the unmatched quality and performance they need.

Mill Creek Life Sciences is dedicated to meeting ALL quality requirements to serve our customers. We offer your cell culture more than just the highest quality products — we provide support for you as well. As your partner, our quality and experience mean more growth for you!

Superior cell growth! 100% Xeno-free!

Cells grown in **PLTGold**[®] perform equivalently to **PLTMax**[®] and far better than other alternatives.



Master File with the FDA

Gamma irradiated hPL available

Manufactured under cGMP in large batches to reduce lot-to-lot variation

No heparin needed and no clot formation

Great for generating cells in large scale bioreactors

Increased cell growth kinetics

Effective with MSCs and other primary cells



Mill Creek Life Sciences provides the tools and technologies to support the development and application of cellular and biologic therapeutics. Mill Creek technology was licensed from discoveries at Mayo Clinic, one of the world's leading non-profit medical centers. Mayo Clinic's Rochester campus is located adjacent to Mill Creek Life Sciences. Both organizations are committed to discovering and applying innovative approaches to patient care.





PLTGold®



About PLTGold®

PLTGold® is a non-xenogeneic, animal serum-free product derived from human platelets. **PLTGold**® is used as a manufacturing component in the generation of adult stems cells. A Master File for **PLTGold**® is registered with the FDA and is cross-referenceable. Contact us for more information on the MF.

PRODUCT	CATALOG #	SIZE
PLTGold® Research Grade	PLTGold27R	27mL
	PLTGold100R	100mL
	PLTGold500R	500mL
	PLTGold1000R	1,000mL
PLTGold® Clinical Grade (GMP)	PLTGold27GMP	27mL
	PLTGold100GMP	100mL
	PLTGold500GMP	500mL
	PLTGold1000GMP	1,000mL



Using PLTGold®

- Thaw at 37°C or 4°C.
- It is not recommended to expose PLTGold® to repeated temperature changes that could affect the integrity of its components. For that reason, we recommend thawing the product and preparing aliquots as soon as it is received.
- Aliquots can be stored at -20°C or colder protected from light. Storage at 4°C is recommended for periods no longer than 2 weeks.
- Complete media can be prepared, aliquoted and stored at -80°C for up to 9 months. Do not store complete media at 4°C for longer than 2 weeks.
- Filtration of PLTGold® by itself is not recommended.
 Filtration of complete media containing PLTGold® may be performed, if necessary.

Culture Conditions Using PLTGold®

- Cell seeding should be performed following the general guidelines for the specific cell type. For Mesenchymal Stem Cells (MSCs), cells are typically plated at approximately 2x103 — 5x103 cells per cm2.
- For MSCs, PLTGold® can be used at 5% vol/vol in a typical cell culture medium such as DMEM or α-MEM. If the basic media doesn't contain Glutamine, a source of L-Glutamine will need to be added to the media at a final concentration of 2mM. For other types of cells, the concentration of PLTGold® will need to be titrated according to the application (a titration from 2% vol/vol to 10% vol/vol is recommended to establish the percentage of PLTGold® needed for the cell type to use).
- Do not allow primary MSC confluence to exceed 70-80%.

Origin

 PLTGold® was developed to eliminate the need for heparin in hPL. It is an unfractionated product derived from our original hPL, PLTMax® that does not contain or require the addition of heparin. PLTGold® remains clot free and with similar performance to PLTMax®.

References (see website for additional references)

- Lanzoni G, Linetsky E, Correa D, et al. Umbilical cord mesenchymal stem cells for COVID-19 acute respiratory distress syndrome: A double-blind, phase 1/2a, randomized controlled trial. Stem Cells Transl Med. 2021 May;10(5):660-673.
- Boland LK, Burand AJ, Boyt DT, et al. Nature vs.
 Nurture: Defining the Effects of Mesenchymal Stromal Cell Isolation and Culture Conditions on Resiliency to Palmitate Challenge. Front Immunol. 2019 May 10;10:1080.
- Crespo-Diaz R, Behfar A, Butler GW, et al. Platelet lysate consisting of a natural repair proteome supports human mesenchymal stem cell proliferation and chromosomal stability. Cell Transplant. 2011;20(6):797-811.

Safety Information and Precautions

- Products not intended for direct use in animals or humans.
- All PLTGold® donors have been tested for infectious diseases; however, as a blood derived product, PLTGold® should be handled and treated as potentially infectious.
- Universal precautions for handling and disposal of biological products should be used when working with PLTGold[®].