

PLTMax® Human Platelet Lysate

Catalog Numbers: PLTMax100R & PLTMax100GMP

Description

PLTMax® Human Platelet Lysate is a xeno-free, animal serum-free product derived from human platelets. PLTMax® is used as a manufacturing component in the generation of adult stems cells in Phase I to Phase III clinical trials in North America, Europe, South America, Middle East, Asia, and Australia in indications including neurology, nephrology, gastrointestinal disease, wound repair, and cardiology.

Safety Information

All PLTMax® donors have been tested for infectious diseases; however, universal precautions for handling and disposal of biological products should be used when working with PLTMax®.

Source

PLTMax® is derived from normal human donor platelets collected at US blood centers. Multiple donor units are pooled in large batch sizes and manufactured to produce a consistent product.

Quality Control

All materials are obtained from government-inspected facilities and are of US origin.



PLTMax® is a registered trademark of Mill Creek Life Sciences, LLC. Product is manufactured by Mill Creek Life Sciences based in Rochester, MN, USA, and is distributed by Biological Industries USA.

Instructions for Use

- Thaw PLTMax® at 37°C. Thawing at room temperature or at 4 °C is acceptable, but can increase the formation of precipitates in the product.
- It is not recommended to expose PLTMax® 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 for up to 1 year or at -80°C for up to 3 years. Aliquots may be stored at 4°C for periods no longer than 3 months.
- Do not store complete media at 4°C for longer than 2 weeks.

Culture Conditions using PLTMax®

- 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 to 5x10³ cells per cm². Do not allow primary MSC confluence to exceed 70-80%.
- For human MSCs, PLTMax® can typically be used at a final concentration of 5% vol/vol in the appropriate cell culture medium. If the culture medium used does not already contain Glutamine, a source of L-Glutamine must be supplemented to the complete media at a final concentration of 2 mM. For more information on media preparation and use, refer to specific culture instructions using PLTMax® with MSC NutriStem® Basal Medium.
- For other cell types, the concentration of PLTMax® should be titrated to establish the appropriate percentage of PLTMax® needed for each cell type. A titration range from 2% vol/vol to 10% vol/vol is recomended.
- Due to the presence of certain plasma components such as fibrinogen and coagulation factors, the use of PLTMax® involves the addition of heparin to the cell culture media at a final concentration of 2 U/mL to minimize clotting.

Particulate Formation

Particulate formation or clotting in PLTMax® is normal. Filtration is not recommended. Particulate formation can be minimized by avoiding freeze/thaw cycles or by preventing extended storage at 4°C. PLTMax® shows no loss of function even in the presence of large particulates in the supplement. If a specific application requires minimizing the presence of particulates, avoid the particles by pipetting around them.