

# 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 2x10<sup>3</sup> to 5x10<sup>3</sup> cells per cm<sup>2</sup>. 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.